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THE ZAMINDARI PROBLEM IN MADRAS

BY

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The reform of the land system, both as a form of tenure and as a mode of taxation, is one of the pressing administrative and economic problems of India. In the Provinces of Bengal, Behar, Orissa and Madras, the whole or part of the land is under the zamindari system of tenure, and the payment due from the zamindars (*peishcush*) is fixed for all time. The problem is most acute in Bengal, where nearly the whole land is settled on the zamindari permanent basis. In Madras a little over a fourth of the land is under the same tenure, and the system dates from 1802. Originally the *peishcush* to be paid by the zamindar was as high as two-thirds of the rent, but subsequently owing to the extension of tillage and the rise of prices, the *peishcush* is to-day only a small fraction of the rent. The total rental has increased to about Rs. 250 lakhs but the *peishcush* still remains Rs. 45 lakhs, and thus the unearned increment enjoyed by the zamindars is about Rs. 2,05 lakhs. On the other hand, the land revenue burden is heavy in the ryotwari areas, and of the total land revenue of Rs. 7 crores, including irrigation charges, Rs. 6,55 crores (or 94%) comes from these areas.

Soon after the Congress Government came into power in Madras, a Parliamentary Committee was appointed to go into the question, with the Revenue Minister, Mr. T. Prakasam, as Chairman. The Committee after an elaborate

enquiry produced a voluminous report. It is not altogether convincing but the thanks of Indian economists are due to the Committee for having brought to light various documents which hitherto were considered confidential.

The Committee has dealt with the zamindari problem in its juridical aspect and has altogether neglected its economic and social aspects which are certainly more important. They delved deep into the historical documents connected with the origin of the zamindari settlement and came to the following conclusions: (i) that the ryot, and not the zamindar, is the proprietor of the land, and (ii) that the rents payable to the zamindar by the ryot were permanently fixed in 1802, even as the *peishcush* payable by the zamindar to the Government. Perhaps these conclusions may be gratifying to the tenants, but they are not warranted by the documents on which the Committee bases them. No doubt the zamindar has had too much and the ryot has borne heavy burdens, but the way to relieve those burdens does not lie on the lines chalked out by the Committee.

We will now proceed to examine the two principal conclusions of the Committee.

Is the Ryot the Proprietor?

Who is the proprietor of the land? An endless war of words has raged on this knotty problem for about 150 years, and we are not the wiser for it. Theories have been urged supporting the claims of the king, the village community and the cultivator to the proprietorship of the soil, and the codes of Manu, Jaimini, Narada and other Hindu lawgivers have been quoted. In one passage, Manu lays down that the land belongs to him who first cleared the forest and broke the sod (*Sthanuchedasya kedaram*); but elsewhere he says that the king has power to eject the ryot who cultivates the land badly. The fact is that the Hindu codifiers did not busy themselves with the question of landed property in the abstract. In those days, when population was scanty, land abundant, demands of the State high, and famines frequent, the question was, as Moreland says, how to keep the peasant on the land, and not off it. Therefore the question of rights never worried them. As long as the peasant paid

his dues to the king, no one ever thought of ejecting him from the land.

Even in the West, notions of private property in land in the absolute sense were not recognised for a long time. Largely as a result of the agricultural improvements carried out by the English landlords in the 18th century, a conception that private property in land was essential for economic progress grew strong, especially in England, and this can be traced in the writings of Montesquieu, Adam Smith, Arthur Young and others. Their ideas greatly influenced the authors of the Permanent Settlement,—Sir Philip Francis, Sir John Shore and Lord Cornwallis. They thought that it was in the best interests of the State to create proprietary rights where such rights did not exist. This idea strongly appealed to the Court of Directors of the East India Company, and in their words, only private property and "the sure enjoyments of the benefits derived from it" would "awaken and stimulate industry, promote agriculture, extend improvement, establish credit and augment the general wealth and prosperity." It is such a right of private property that they wanted to confer and in their eagerness they conferred it on the man whom they knew best, the zamindar. This, of course, insured the regular payment of their revenue, and certainly this also influenced their decision.

Thus, in Bengal, proprietary rights were granted to the zamindars by the Regulations of 1793. The same system was introduced into Madras over a third of the Presidency. A further extension was contemplated but this was resisted by that farsighted and benevolent administrator, Sir Thomas Munro. The contention that the zamindars continued to be mere rent-collecting agents is against all the intent and purpose of the authors of the Zamindari Settlement. The zamindari system was not meant to be merely a mode of revenue management; it was to be a tenure as well. It is the failure to keep alive the distinction between a revenue management and a tenure that has given rise to some fallacies in the Majority Report.

It is now clear that the step taken by Lord Cornwallis was a mistake, but it cannot therefore be denied that

proprietorship was conferred on the zamindars. If the present Government, emulating the example of Lord Cornwallis, confers on the ryot the absolute right to the soil, the results may not be equally disastrous. The point to be noted is that notions about land as a social asset have materially changed since 1802, especially after the Great War. It is now being recognised that land is not merely a concern of the cultivator or landlord, but a vital concern of the State. The Report of the English "Agricultural Tribunal" (which by the way was composed mostly of economists) has cogently put it:—"Agriculture cannot be regarded simply as a business, but as something more. What is that something more, and why? It is partly, that agriculture is charged with the use of the land which is limited in amount and of peculiar economic and social value; partly, the great importance of the produce of the soil to the life and industry of the people in peace and especially in war; and partly, ideas as to the value of a flourishing rural population . . . . ." The question of proprietorship is to-day rather a matter of theoretical interest. Land is really a trust, and the State is the ultimate trustee.

A decision as to the proprietorship of the soil is not called for at the present juncture. This question has not been decided in the case of ryotwari areas so far, and perhaps wisely. We are not aware of any harm having come to the ryotwari pattadars owing to a lack of definition of their rights. Surely if this is so with the ryotwari pattadars, the need for granting proprietary right to the *zamin* ryots cannot be more urgent. I make bold to call the whole controversy "a profitless war of words" (*pace* Baden-Powell), and such controversies must be left to jurists and archivists. The Committee contend that a decision on the question is vital for regulating the rent and for fixing the responsibility for the maintenance of irrigation works, affording grazing facilities, etc. But I daresay their decision would have been different had they utilized the latest experience of Western Europe in regard to land tenures. It is for the State to assert its superior right and order matters in the best economic interests of the community and in its own financial interest.

Was Rent fixed permanently in 1802?

The other important finding of the Committee is that rents, like *peishcush*, were permanently settled in 1802. The Majority Report takes its stand chiefly on the authority of certain State papers, the Regulations of 1802 and the Board of Revenue Proceedings of 2nd December, 1864, which the Committee characterise as "famous." Before going into the actual examination of these documents, it is necessary to explain certain prevailing economic and political ideas which influenced the authors of the Permanent Settlement. Sir Philip Francis, who was really the originator of the Permanent Settlement, was a serious student of Political Economy, and his writings contain copious quotations from Montesquieu, Adam Smith and the elder Mirabeau, who were all ardent advocates of the *laissez-faire* doctrine. Therefore, while these were all keen on private property in land, they did not want the relation between the landlord and tenant being laid down by law. They believed in non-intervention. Adam Smith wrote in 1776: "The principal attention of the sovereign ought to be to encourage, by every means in his power, the attention both of the landlord and the tenant, by allowing both to pursue their own interest in their own way and according to their own judgment."

These ideas were echoed by the authors of the Permanent Settlement. Sir Philip Francis wrote: "If the zamindars and ryots are left to themselves they will come to an agreement in which each party will find his advantage." Again, "the amount of rent to be paid per *bigha* must be settled between the zamindar and his tenant. Government can never descend to the ryots so as to fix any general assessment upon them." But it was given to Lord Cornwallis to carry out these ideas. He recognised the "productive principle" of private property and its magical effect in turning sand into gold. He however reserved to the Government the power to interfere when the relations between the landlord and the tenant became strained. But true to the spirit of the *laissez-faire* doctrine, he held that if only Government did not interfere, natural economic laws would

come into operation. If the ryot was rack-rented, he would desert his land and the landlord would suffer. In a Minute, by way of reply to Sir John Shore, Cornwallis said: "I understand the word permanency to extend to the *Jumma* only, and not the details of the settlement; for many regulations will certainly be hereafter necessary, for the further security of the ryots in particular, and even those talookdars, who, to may concern, must still remain in some degree of dependence on the zamindars; but these can be only made by Government occasionally, as abuses occur."

The regulation that the zamindars cannot impose new *abwabs* or cesses is ingeniously interpreted by Hodgson to mean that he had fixed the rents also in perpetuity. Here, his reply to Shore must again be referred to. Cornwallis wrote: "Neither is prohibiting the landholder to impose new *abwabs* or taxes on the lands in cultivation tantamount to saying that he shall not raise the rent of his estate."

Cornwallis' statement that the "proprietor cannot raise the customary rent which is the utmost that the ryot can afford to pay" must be taken with reference to the economic theory of rent which prevailed at the time. I do not wish to go into detail about this point, but it may be mentioned that his 'customary rent,' if put in its proper setting, would only mean an economic rent which would change according to the shifting margin of cultivation as well as its changing intensity. The prevailing economic idea of the time was that the proper rent would be fixed by the working of competition, and it was considered wicked on the part of the State to interfere.

I have gone at some length into this question of the economic ideas that influenced the authors of the Permanent Settlement, because the Permanent Settlement was primarily an economic measure, one which aimed not only at the conversion of the extensive waste lands into productive fields but also an all-round economic development of the country. That being so, it is necessary to read the Regulations and the State papers in the light of this economic background. If that is done, I am sure, the authors of the Majority Report would be much less dogmatic on the point.

It is argued by the Majority that the *patta* is the *sanad*

of the ryot. As regards this, it is best to quote a contemporary opinion on the subject. About the same time as Mr. Hodgson wrote his commentary on Permanent Settlement Regulations (*i.e.*, in 1808), Mr. Thackeray, a Member of the Board of Revenue, wrote in a Memoir to Lord William Bentinck: "Even in making the *pottah* regulation, they do not seem to have come to any decision on the subject, because the regulation may be construed in favour of either zamindar or ryot." When such doubts were expressed even in those days, how can it be asserted that the *patta* was the permanent counterpart of the *sanad*?

It has also been argued that the provisions in the *Patta* Regulations, as they were introduced into Madras, had been the result of a decade's sad experience of the working of the permanent settlement in Bengal, and that the rents were fixed in perpetuity in Madras. There were some persons even in Bengal who contended that the rents were also fixed for all time.

The Committee pin their faith on what they call the "magnificent" Report of Mr. Hodgson. But I can quote chapter and verse to prove that Mr. Hodgson's opinions on the subject were contradictory. In his Report on Peddapore Zamindari, he entertains diametrically opposite views. This may be read in the Fifth Report, along with his other minutes.

Another point raised is that the zamindars' claim to raise rents following a rise in prices was untenable, because when the permanent settlement was made no one dreamt of a rise in prices. This is not true. It is undeniable that both Lord Cornwallis and Sir John Shore did visualise changes arising from price fluctuations and gave some thought to the question; and in the end Cornwallis decided that the Zamindars were fully entitled to the advantages arising from a rise of prices. He says this in his reply to Sir John Shore, 3rd February, 1790:

"Equally favourable to the contributors is the probable alteration in the value of silver; for there is little doubt but that it will continue to fall, as it has done for centuries past, in proportion as the quantity drawn from the mines and thrown into general circulation increases. If this be admitted, the assessment will become gradually lighter, because as the value of silver

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diminishes the landholder (*i.e.*, the zamindar) will be able, upon an average, to procure the quantity which he may engage to pay annually to Government, with a proportionately smaller part of the produce of his lands than he can at present."

Somehow this passage is not printed in the Committee's Report nor in the appendices, but this may be seen in the "Fifth Report" (Firminger's Edition, Vol. II, p. 529); Mr. Hodgson also admits this in his Minute, dated 28th March, 1808.

In those days there were both money rents and grain rents and the permanent settlement took cognition of both. This may be seen from Mr. Hodgson's evidence before the Select Committee of the House of Lords in 1830. The permanent settlement was made on the basis of both these rents. If it is contended that the rents were also fixed permanently, then by simple reasoning it must apply both to money and to grain rents. How can a permanently fixed grain rent be commuted at 1801 prices or at any other price?

The fact that zamindars generally did not raise rents till 1865 has been construed as evidence to show that rents were fixed in 1802, but here it is important to remember that prices went on falling throughout the first half of the 19th century and began to rise in the latter half. During the former period the *zamin* ryots were happier, thanks to the grain rents. Had money rents been insisted on, they would have been in as sad a plight as ryotwari pattadars who suffered terribly during the period.

On the strength of such doubtful findings, the Majority Report recommends a reversion to the 1801 money rates, although not a single witness has asked for it. The practical difficulties of such a step have not worried the Committee; nor do they visualize the serious repercussions of this proposal, if given effect to. It will necessarily lead to analogous claims from the ryotwari pattadars which cannot be justly resisted. If that is done, what about its far-reaching effects on the finances of the Province? What will be its repercussions on the zamindars? Another probable effect of the proposed measure would be to raise the price of land in *zamin* areas, and thus lead to undesirable speculation. The effect of this may be to divert urban capital into land

and retard industrial development. It is evident, therefore, that the question has not been considered either from the point of the finances of the State or of the efficient functioning of our economic system.

The Plea of "Justice"

It is claimed that the recommendations of the Majority Report were made in the interests of "bare justice." But the proposed measure is justice with a vengeance, and involves injustice to many. First, of all, no permanent settlement can ever be just in a world where economic conditions are always changing. The State must be in a position to demand of its citizens according to its wants and according to their ability to pay. A permanent settlement mortgages the interests and resources of the future generations in perpetuity. This gives away the unearned increment to private individuals and defrauds the State of its just rights. The authors of the Permanent Settlement committed a great blunder in so far as they introduced an inelastic element in the fiscal system, greatly retarding our progress; and it would have been even more so had the Permanent Settlement been made with the ryot. In trying to set right one blunder by another, we will only be multiplying blunders. The Committee want to mete out justice, but it must be justice all round. In my opinion, the Report has done scant justice to the State. The point of view of the State, its rights and necessities, whether in regard to ownership of the soil or the needs of the revenue, has not been given the consideration it deserves.

Secondly, the "justice" that is being sought to be done is misplaced. There is no guarantee that the actual tiller of the soil is going to benefit by the proposed measure. On the other hand, the many intermediaries between the zamindar and the cultivator will prevent the benefits from percolating to the tilling classes. Therefore, absence landlordism will continue with the inevitable results, namely, rack-renting and inefficient production. Time has proved that Lord Cornwallis committed a mistake in conferring proprietary rights in the soil on the zamindar. Let us take a lesson and let us not repeat the mistake by perpetuating one

more dead-wall against the progress of agricultural economy; for, the small middleman is even more rapacious than the big. From certain evidences collected by the Committee, it is known that in some areas these middlemen take from the actual cultivator more than four times what they pay to the zamindar. Agricultural economy in the West is much less burdened with middlemen in land. An essential part of any land reform to-day must be relief to the tiller of the soil. If this is not done to-day, our hands may be forced for a more radical reform to-morrow. It is a pity that the Committee has ignored this important point.

Other Points

Considerations of space do not permit my referring to the other objectionable points in the Majority Report. Rents are sought to be fixed on the rates of 1802. *Waram* (*batai*) is to be commuted at 1801 prices. The equality and wisdom of this measure have been effectively questioned. The waste lands are sought to be assigned to the ryots on the assumption that they are communal lands, lands which originally belonged to the village community. I must point out here that Sir Thomas Munro acted in exactly the opposite manner. For him the breaking up of the waste was the grand source of the State's finances. The conversion rates have been questioned. Benefits from opening up new irrigation works are denied to the zamindar, while throughout India they are claimed and enjoyed by the State as the landlord in ryotwari areas. Crop-war rates are condemned, but I claim that they are a most equitable arrangement and must be introduced in the ryotwari areas also. This will be much-needed corrective to the present conception of land revenue as a tax on land and not on income. Immense importance is attached to the currency ratio as being the root of all evils—a rather untenable proposition. These are some of the important defects of the Majority Report.

Inadequacy of the Enquiry

Finally it must be said that a right approach to the problem has not been made. More important than the

juridical relationship between the landlord and the tenant are the economic results of this system. Are the rents in the zamindari areas oppressive? Is the tenure of a *zamin* ryot insecure? Is the zamindari settlement conducive to the economic development of the country? Are lands properly utilized? Is cultivation more inefficient, marketing more difficult, indebtedness more crushing, in the zamindari areas than elsewhere? Has the zamindari system worked in a way detrimental to the economic welfare of the country? These are all most relevant points, and yet little useful information on these is found in the Report. A lot of material has been gathered on some of these topics, but there is no relationship whatever between the evidence and the recommendations. Such procedure is unprecedented in the history of Indian legislation. A question is sought to be decided merely on the grounds of certain interpretations of regulations and statements of a by-gone century. This hardly fits in with legislation concerning living problems. These must be tackled on their own merits with due consideration of the State's interests.

It has been said that the zamindari system is a fifth wheel to the coach. The defects of the zamindari system are fundamental. Firstly, it is a permanent settlement. A permanent settlement is unsuitable whether it is made with the zamindar or with another intermediary, because it gives to private persons the unearned increment from land which ought to go to the State, as it is the result of social progress. This was Ripon's chief argument against permanent settlement being introduced in the ryotwari areas. Secondly, zamindari settlement is a system that permits a long chain of middlemen to perpetually exploit the scanty resources of the country. Thirdly, it is certain that it has not resulted in those lasting benefits expected of it by its authors. Therefore, land reform is urgently called for; but what is required is a thorough overhauling of the system with a view to devising a more suitable arrangement. There is no use tinkering with the problem. As Mr. A. Rangaswami Aiyangar, a member of the Committee, has pointed out in his dissenting Minute, the Majority Report is only perpetuating the zamindari settlement. Those who went to

remove the fifth wheel are seeking to add a wheel within a wheel. The proper solution may be to remove the fifth wheel, and if an equitable scheme of compensation is agreed upon, one cannot see why the zamindari system cannot be liquidated and all land in the Province brought under a uniform system, in which the interests of the cultivator and the State will be amply provided for. It is well-known that in Japan the feudal estates of the Samurai were liquidated by the state giving compensation. The money thus liberated found its way into trade and industry and paved the way for Japan's industrial pre-eminence.

Conclusion

The Committee, mainly on juridical grounds, conclude that the ryot is the proprietor of the soil and that rents were permanently fixed in 1802. It has been shown above that even on juridical grounds these conclusions are not unshakable. A permanent settlement on the rates of 1802 will be unjust to many parties. In fact, if we go back to the grain rents of 1801, this would be found extortionate, having been generally 50 to 60% of the gross produce. The rents fixed in 1802 cannot be the proper basis for the rents now. What the zamindari ryots have always asked for is an approximation to the neighbouring ryotwari rates. It is not clear why the Majority Report has not considered this proposal. The land system in the zamindari areas is highly defective, and it must be drastically overhauled, but the bill as drafted by the Committee will not lead to such an overhauling; on the other hand, such legislation will lead to financial embarrassments in the State, and may fan the flame of social discontent among the cultivating classes, not only in the zamindari but in ryotwari tracts also. It is true the Committee has collected a lot of data, although not on all the relevant points, but these have been imperfectly utilized. A fuller consideration of the questions has therefore become necessary. Matters having proceeded so far, the *status quo* is now out of the question; we must go forward, but proceed in the right manner and devise such a land system as would enable us to stave off social unrest and maximise the economic welfare of the rural masses.

A SCHEME FOR THE SURVEY OF RURAL INDEBTEDNESS IN INDIA

BY

B. G. Ghate, Ph.D. (London)

The Central and Provincial Banking Enquiry Committees of 1929-31 attempted an examination of certain aspects of the problem of rural indebtedness in India and collected a great deal of information on the subject through intensive village surveys and other sources. But, for various reasons, their findings have lost much of their importance from the point of view of economic analysis and administrative policy. In the first place, these Committees were severely handicapped by the fact that the previous information on the exact nature of the debt-structure of Indian agriculture was altogether too vague to afford any basis for generalisation, since, before the publication of their reports, it was not possible to estimate even approximately the total volume of indebtedness. The entire work of planning and organising these enquiries, therefore, devolved upon these Committees and there is every ground for believing that they received practically no guidance from the Central Committee in respect of the methods of investigation to be pursued. It will be shown below that the lack of guidance from the Central Committee and the lack of collaboration among the Provincial Committees themselves were responsible for the different methods adopted for estimating the volume of debt; and it will also be shown that these methods differed from each other in so many ways that the figures for debt per acre, debt per rural family, etc., are hardly comparable as between the various provinces.

There is also an enormous volume of evidence to show that these Committees failed to envisage the problem as a whole and concentrated their attention only on certain aspects. These were (*a*) the total volume of debt and (*b*) the

great growth of indebtedness during recent years. It would appear from a careful perusal of their reports that they were not clear in their own minds as to what information was necessary for estimating the "burden of debt" as opposed to the "volume of debt." In order to appreciate the full implications of the problem, it is necessary not merely to estimate the volume of debt but also to examine the structure of that debt. The term the "structure of debt" may be taken as denoting the following essential relationships, namely, those between:—

(1) the lender and the borrower;

(2) the volume of an individual's debt and his income;

(3) the burden of debt charges and the cost of production; and

(4) the amounts of seasonal debt and the total debt.

The figures relating to the total volume of debt do not convey any meaning as to the burden of debt, because it is possible that the distribution of debt may be so uneven that the large debts of a small minority may give an impression that the average debt per head is also great. The figures of total debt do not again throw any light on the proportion of seasonal debt to permanent or long-term debt. In every agricultural country of the world, the farmer has to incur large debts for financing the growth of crops, and information regarding the seasonal debt in a particular country is of vital importance in dealing with problems connected with rural credit. Such information is not available for India, and, except by a few Provincial Committees, no attempt was even made to estimate the seasonal debt and the long-term debt of the Province. It is also possible that the high rates of interest charged by the money-lender are purely nominal in the sense that the creditor never expects to realise them. Moreover, the burden of debt can only be estimated by the proportion that the debt-charges bear to the net income per year; and it cannot be done unless there is

reliable information regarding the family budgets of a representatively large number of cultivators.

It would not, therefore, be far from the truth to say that the problem of rural indebtedness in India has not yet received the scientific analysis that its importance calls for. If there had been a greater collaboration between the Provincial Committees and if the problem had first been properly defined, it is probable that the labours of these Committees would have yielded much better results and that their findings would have served as a good basis for legislative measures to combat rural indebtedness and would have also presented a clearer economic analysis of the problem.

It is, therefore, suggested that as far as possible the future methods of investigation should be such as would be expected to throw the greatest light on the relationships involved in the debt-structure; and as far as possible, they should also be based on a scheme which could be uniformly applicable to all the provinces. The figures in respect of debt, which is closely connected with the economic welfare of the cultivator, would then furnish a basis for comparing one tract in a particular province with another or one province with another. The object of this paper is to devise a scheme which would avoid all the drawbacks of the schemes adopted by the Provincial Banking Committees and which would also be suitable to all the Provinces alike.

Generally speaking, the Provincial Banking Committees adopted one or the other of the following methods for the estimation of the volume of total debt:—

Method I—An attempt to estimate the debt per head of the rural population and hence the total debt of the province.

Method II—An estimate of the total debt based on the statements of indebtedness of the members of the co-operative societies.

Method III—An estimate by means of sampling of the relation between the total secured and unsecured debt and thereby the calculation of the total debt.

Method IV—The method of sampling and obtaining detailed figures regarding indebtedness through intensive house-to-house enquiries.

METHOD I

An Estimate of the Total Debt by Simple Sampling

This method was adopted by the Bombay, Assam and Bihar and Orissa Banking Committees. The object of this method was to obtain through intensive village surveys the actual indebtedness of a certain number of cultivators from various parts of the province, and on the basis of these figures to deduce the average indebtedness per head of the rural population.

This method can best be explained by describing the procedure adopted by the Bombay Committee. The Committee first grouped the different parts of the province into ten tracts on the basis of similarity in (*a*) soil, (*b*) rainfall, (*c*) crops and (*d*) agricultural and business conditions. These ten tracts were treated separately.

From the information obtained from a few village surveys in each of these tracts, averages were obtained for each group in regard to (*a*) indebtedness per head, (*b*) debt per acre and (*c*) debt as a multiple of land revenue. In order to estimate the total debt of the Presidency, the agricultural population of each tract was multiplied by the average amount of debt per head in that tract, and similar figures were thus obtained for all the tracts. Finally, the addition of the figures so obtained was taken to represent the total debt of the Presidency.

This method is subject to criticism on the following grounds:—

(*i*) From the point of view of statistical method, it is not possible to divide a whole province into tracts on the basis of homogeneity.

(*ii*) It does not furnish any basis for determining the margin of error and the sets of multiples

used are so numerous that the chances of error are generally maximised.

(*iii*) Even if such a method succeeded in accurately estimating the volume of total debt, it would not throw any light on the various essential relationships necessary for estimating the burden of debt and the structure of that debt.

In short, this method is altogether too simple to furnish any reliable information as to the exact nature of the debt-structure and the results obtained therefrom are statistically unreliable.

METHOD *II*

An Estimation of the total Debt based on the Statements of Indebtedness of the Members of Co-operative Societies

This method was first adopted by Darling in his "Punjab Peasant." His estimation of the total debt of the Punjab was based on the statement regarding indebtedness which every member of the co-operative society has to submit; and it was assumed that "the co-operative population was representative of the whole as it included all classes of proprietors." From the statements regarding indebtedness of about 44,000 members, it was found that mortgage debt was 45 per cent of the whole. On the basis of the figure for secured or mortgage debt supplied by the Registration Department, the total debt of the Province was deduced, since the statements regarding the indebtedness of the members of co-operative societies showed that secured debt was about 45 per cent of the whole. The Punjab Banking Committee made certain modifications and revised Darling's estimate for 1921 so as to make it applicable for the year 1929.

In the absence of funds for the house-to-house enquiry which will be suggested below, this method has great

advantage over any other method. In the first place, the statements regarding the indebtedness of the members of co-operative societies are readily available in every Province; and these statements taken together with other documents which are also available, can furnish a great deal of information regarding the distribution of debt, the purposes for which it was contracted, the average debt per rural family according to size of the holding of that family, etc.

But the drawback of this method would always lie in the fact that the co-operative population cannot be held to be representative of the whole. In some provinces, the co-operative movement is so backward that only a certain class of cultivators is attracted by it; and experience shows that it is not always the representative class. Moreover, this method has all the drawbacks of the following method, because it will be shown below that the proportion between "secured" and "unsecured" debt is a very unreliable guide for estimating the total debt.

METHODS *III*

An Estimation by Simple Sampling of the Relation between Secured and Unsecured debt and hence the total debt

This method was adopted by the Madras and the United Provinces Committees. It relies chiefly on (*a*) estimating the total secured debt of the province and (*b*) by intensive village surveys to estimate the proportion between secured and unsecured debt. This proportion is applied to the whole province and on the basis of the secured debt, which can be deduced from the reports of the Registration Department, the total debt of the Province is then estimated.

The annual reports of the Registration Department specify all transactions such as mortgages, bonds, sales, gifts, etc., involving a property of Rs. 50 or more. Hence the "secured debt" may be taken as consisting of debts up to the value of Rs. 50 or so, incurred on any security, while an "unsecured debt" is a debt obtained on personal security.

It was claimed by the Madras and U.P. Committees that it was possible to obtain a good indication of the total secured agricultural debt from the annual reports of the Registration Department. But the "secured debt" incurred during a particular year does not by itself constitute the total debt, because the total secured debt consists of an accumulation of many years' secured indebtedness. For example, a cultivator may borrow Rs. 100 by mortgaging a part of his farm in one year and he may contract a debt of Rs. 200 the next year by mortgaging the whole of his farm. His total secured debt, is, therefore, (Rs. 100+200) Rs. 300, though in a particular year he may have incurred the secured debt of only Rs. 100 or Rs. 200. Hence it becomes absolutely necessary to determine the average duration of a bond and of a mortgage. This is done by taking numerous averages which are in themselves very complicated and unreliable. Thus, if it is found that the average duration of a mortgage is 5 years and that of a bond 3 years, the total secured debt is taken as consisting of:—

(*i*) The total mortgage debt of the previous five years or the mortgage debt of a particular year multiplied by 5,

PLUS

(*ii*) The total bond debt of the previous three years or the bond debt of a particular year multiplied by 3.

Having thus estimated the amount of secured debt, it is necessary to establish some kind of relationship between secured and unsecured debt. This can be done by making intensive village surveys and if it is found that the secured debt is, say, equal to the unsecured debt, then the total debt is twice the secured debt as deduced from the reports of the Registration Department.

This method is open to grave criticism on the following grounds:—

(*i*) The average duration of a bond or mortgage is not specified in the deed and any averages

regarding average duration are bound to be highly conjectural. The Madras Committee was seriously divided on this question and Prof. P. J. Thomas, the economist on that Committee, maintained that any estimate of the duration of bonds or mortgages is based on insufficient data and is bound to be misleading.

(*ii*) There is no ground whatever to believe that the amounts specified in mortgage or bond deeds are necessarily the amounts borrowed.

(*iii*) The Registration Department makes no distinction between an agricultural and a non-agricultural mortgage and the figures for secured debt obtained from Registration statistics have also to allow for this fact. And as it is extremely difficult to find out which mortgage is on agricultural property and which is purely commercial, another factor of a highly unreliable nature has to be introduced in estimating agricultural secured debt only.

In short, this method is altogether too unsatisfactory to give correct results, since it is based on far too many averages and all these averages are almost conjectural. Moreover, it has to use far too many sets of multiples and an error in any of them may greatly vitiate the total estimates of debt. But the greatest drawback of this method is that it does not throw any light on the debt structure and aims entirely at estimating the volume of debt only.

METHOD IV

The Method of Simple Sampling based on Intensive Village Surveys

This was the method adopted by the C. P. Banking Committee. At the very outset, the Committee decided to

reject the Methods II and III. In the first place, in view of the comparative backwardness of the co-operative movement in the Province, it was decided that it would be erroneous to assume that the co-operative population is representative of the whole. Secondly, half of the Province is malguzari and the other half is ryotwari. Under the malguzari system of land tenure, the tenant-cultivator generally obtains the lease of his land for a specified term of years and if he is a "permanent tenant," he cannot be ejected except in exceptional circumstances. But neither of them can alienate or mortgage or transfer their lands, the proprietary rights being vested in the malguzar or the zamindar. Hence, the figures for secured debt do not throw any light on the indebtedness of these tenants because they have no mortgage security to offer. It was, therefore, necessary that some new method should be evolved for the requirements of this Province and it was decided that as much data as possible should be obtained from house-to-house enquiries and intensive village surveys.

At the time of the Banking Enquiry Committee a re-settlement was in progress in four districts of the province. The Committee sent a detailed questionnaire to the Settlement Officers and compiled a full statement regarding the indebtedness of every cultivator from the answers received from these officers.

In the remaining 18 districts of the province a simple sampling method was adopted. The whole of the province, as in Bombay, was divided into four groups on the basis of similarity in soil, rainfall, productivity and economic conditions. Each of these groups was then divided into taluks and a few of the "typical villages" in each of these taluks were intensively surveyed by the special officers appointed by the Committee. In order to secure a uniformity of results, a detailed questionnaire was sent to them and they were asked to make any special remarks on separate sheets of paper. After the questionnaire had been returned, the Committee split itself into sub-committees and these sub-committees toured some of the villages surveyed by the officers and made independent enquiries to check their results.

In this way, excluding the four districts in which revenue re-settlement was in progress and where every cultivator was brought under examination, out of the remaining 30,000 villages over 6,000 were intensively surveyed with a view to bringing " under examination the individual indebtedness of all the cultivators in them." The Committee thus succeeded in obtaining a debt census of over 2 lakhs of cultivators and the results were then classified and presented in their report in a systematic form.

This method would seem to be the best one as it has numerous advantages over any other. In the first place, the number of cultivators brought under examination in this province was far in excess of those examined in any other province. Secondly, this method is independent of the statements of co-operative population in respect of indebtedness and avoids all the complications of the Madras method in deducing mortgage indebtedness and the ratio of mortgage debt to the total debt.

The greatest advantage of this method, however, lies in the fact that it helps us to elucidate the debt structure of the provincial agriculture. Perhaps no other Banking Committee had been able to throw so much light on the problem of rural indebtedness as the C.P. Committee has done, and some of their findings may be summarised here to elucidate the results that can be obtained from such a method of investigation:

(1) " In Berar at the existing land values the percentage of debt to the total land value of the cultivated acreage is only 17 per cent and the cultivator, therefore, is far from being insolvent."

(2) " 3·9 per cent of the cultivators are hopelessly indebted and their debts amount to 37·4 per cent of the total provincial debt."

(3) " There is a small percentage of persons who are hopelessly indebted and who are responsible for a very substantial proportion of the total indebtedness. At the other extreme,

there comes a much larger percentage of persons who are not indebted at all. And between these two extremes, come the cultivators who are indebted in varying degrees."

(4) "The costs of maintenance and the costs of cultivation for the whole of the province have been obtained and the proportion of debt charges to the net income per year has also been estimated."

A Scheme for Future Debt Surveys in India

The C.P. method has, however, one serious drawback. Only one village, "typical" or "representative" in the judgment of the Committee, was surveyed in each taluk. As Prof. Bowley and Mr. Robertson point out in their *Scheme for an Economic Census of India*, it is difficult or almost impossible to decide as to which village is representative or typical either of a taluk or of province. From the statistical point of view, a village which is typical of a special area may not be typical of each district and much less of a whole province. The fundamental condition for obtaining a total or average based on a sampling enquiry is that every unit in the aggregate shall have an equal chance of being included. This condition can be satisfied by several methods, but the method advocated by Prof. Bowley and Mr. Robertson has been successfully followed in other investigations and it is proposed that the selection of villages for intensive debt surveys should also be based on the method suggested in the *Scheme for an Economic Census of India* by these authorities.

In order to obtain a representative sample of villages it is necessary to survey between 200 to 300 villages in each province according to the population and the size of that province. All the villages in the Province should first be arranged in some definite order. This may take the form of an alphabetical order, or, as the report points out, "there is no objection in arranging the taluks in an order that corresponds to various types of cultivation, if this is done before the selection is made from the ordered list."

Let us suppose that there are 86,618 villages in the province and that it has been estimated that 200 village surveys would give representative averages. Then every 86618/200th village or about 430th village should be surveyed from the list of villages obtained by arranging them in the definite order mentioned above. "When a village has once been selected by the process described, no other can be substituted for it without grave risk of error, however untypical it is or however difficult to investigate; because each peculiar and remote village must have the same chance of inculsion, as the village regarded as typical on *a priori* grounds."

The results obtained can then be checked by methods given by Prof. Bowley and Mr. Robertson and, if necessary, further checks can always be devised by different statistical methods.

Having fixed the number of villages to be surveyed and having made the selection from the list arranged in the definite order mentioned above, the selected village should be surveyed with a view to obtaining a detailed information regarding rural indebtedness. The object of such enquiries should not be purely academic and it should always be borne in mind that accurate information regarding the distribution of debt, the ratio of seasonal and permanent debt, the rates of interest, the costs of production, etc., would furnish a clearer basis for legislative measures to combat rural indebtedness. In short, the purpose of such surveys should be strictly practical.

The main heads of enquiry should be as follows:—

(A) INTRODUCTORY

(*i*) A short description of the village, its total population, the form of land-tenure and agricultural conditions.

(*ii*) Land-tenure, number of cultivators grouped according to the system of tenure and the number of persons who have no land at all.

Most of the information under this group can be checked

from the books kept in the various departments, such as Land-Revenue Department, Registration Department, etc.

(B) ASSETS OF THE CULTIVATOR

(*i*) The size of holding, the value per acre of land, the value of produce.

(*ii*) The amount of land revenue or rent.

(*iii*) The sources of income from subsidiary industries, dairy product, etc.

(C) THE ECONOMIC POSITION OF THE CULTIVATOR

(*i*) The kinds of crops grown, the prices of crops, the total gross income.

(*ii*) The cost of production including rent or land-revenue.

(*iii*) The size of the family, the incidental earnings of the dependents, etc.

(D) DEBT CENSUS

(*i*) Total debt.

(*ii*) Debt on personal and mortgage security.

(*iii*) The times when these debts were contracted.

(*iv*) Rates of interest charged, the actual amount of money paid during the previous five years for debt repayment and interest charges, etc.

(*v*) The names of money-lenders, a list to be obtained from them regarding the number of debtors and a full statement regarding the debts of each individual debtor.

(E) OBJECTS OF DEBT

Attempts to classify debts as productive and unproductive should be given up; and the objects of debt should be broadly classified as follows:—

(*i*) General purposes of maintenance and production.

(*ii*) Extraordinary objects such as social ceremonies, litigation, etc.

(F) SOURCES OF DEBT

Such as from co-operative societies, Government, money-lenders, etc.

It is suggested that a separate form for each family should be filled in by the investigator and after all the forms have been collected a combined statement could then be prepared for each village and the province or district as a whole. The form for the family is shown in Schedule I and for the village or province in Schedule II.

The question regarding the personnel of an economic enquiry which can also have an important political bearing is always difficult to decide. It is clear from the nature of this enquiry that the personnel must largely consist of people who are well acquainted with village conditions and who can also command the confidence of the villager. The Punjab Board of Economic Enquiry has undertaken a number of village surveys, but it is doubtful whether such organisations will have the financial resources to conduct a large enquiry of this kind. The best thing would, therefore, be the appointment of a committee to be appointed by each Provincial Government consisting of:—

(a) An economist as Chairman.

(b) A landlord as member.

(c) A money-lender as member.

(d) A member of the Legislative Assembly as member and

(e) A revenue officer as secretary.

The Provincial Governments should also lend the services of the subordinate revenue staff to these Committees

and the preliminary work of carrying out house-to-house enquiries should be entrusted to this staff. The Committees should then tour most of the villages so surveyed and check the results obtained. The work of sorting out the information for Schedule II should then be completed by the Committee, and the object of the report of this Committee should be to analyse all the relationships involved in the debt-structure and to make recommendations regarding the formulation of a debt policy based on the information obtained through intensive village surveys.

SCHEDULE I

A Statement Showing the Debt of Each Individual in the Village

1	2	3	4	5	6	7	8	9	10	11
Name of the Person.	The Number of Dependents.	The Size of the Holding and the kind of land tenure.	The amount of Land Revenue or Rent.	Total income per year (a) from agriculture (b) from other sources.	Total Expenses of Production.	Total Debt (a) Secured and (b) Unsecured	Amount of money paid towards debt repayment.	Total charges due to rates of interest and the rates of interest.	Objects of debt and the amounts of debt for each object.	Other remarks

SCHEDULE

A Statement Regarding the Indebtedness of

Total Number of Cultivators and Landless Labourers	Total Area of Land under Cultivation	Total Debt of the Village				Distribution of Debt according to Size of Holding				
		Debt of Cultivators		Debt of landless labourers						
		Seasonal Debt	Total Debt	Seasonal Debt	Total Debt	Size of Holding	Number of cultivators	Total Debt of Cultivators	Debt Head	Debt Per Acre
						0 to 5 acres				
						5 to 10 acres				
						10 to 15 acres				
						15 to 20 acres				
						20 to 25 acres				
						25 to 30 acres				
						30 to 50 acres				
						50 to 75 acres				
						75 and over acres				

II

Cultivators in each Village

Debt as as a Multiple of Land Revenue	Paying Land Revenue or Rent	Number	Total Land Revenue Paid	Total Debt according to each group	Land Revenue as a Multiple of Debt	
	Less than Rs 10					
	Between Rs. 10 to 30					
	Between Rs. 30 to 60					
	Between Rs 60 to 90					
	Between Rs. 90 to 150					
	Over Rs 150.					
Debt and Rates of Interest	Distribution of Debt	Number of Debtors	Total Debt of these Debtors	Rates of Interest		
	Less than Rs. 100					
	Rs. 100 to 500					
	Rs. 500 to 1000					
	Rs. 1000 to 2000					
	Over Rs. 2000					
Debt, Income and cost of Production	Earnings from all Sources	Expenses of Production	Total Number of Persons	Cost per Persons	Debt per Rs 100 of Income	Debt Charges per 100 of Income
	Less than Rs 100					
	From Rs. 100 to 200					
	From Rs. 200 to 400					
	From Rs. 400 to 600					
	From Rs. 600 to 1000					
Sources of Debt	(i) From Co-operative Societies					
	(ii) From Government					
	(iii) From money-lenders					
General Remarks						

THE STATE AND ECONOMIC LIFE: A REPLY TO SOME OF THE CRITICISMS

BY

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My *State and Economic Life* was published two years ago. It has been extensively reviewed both in this country and abroad. I have derived tremendous amount of benefit from some of the reviews. It is a matter of great satisfaction to me that the level of these reviews was very high, and with very minor exceptions the suggestions put forward by the reviewers were of a constructive nature. It is not the purpose of this article to answer any of my critics individually or to start a defensive battle of words, but my main aim in writing this article is to clarify some points. Two things have prompted me to write this article: firstly, the publication of my *State Banks for India*, in which I have advocated the active participation of the state in developing banking in this country and secondly, my acceptance of the membership of the Sub-Committee on Agricultural Marketing and Finance of the National Planning Committee. It is said that both these things are against the views which I expressed in my 'State and Economic Life' in which it is alleged that I advocated a policy of non-intervention by the state and deprecated all economic planning. I have been so much misunderstood that I can hardly flatter myself to have made my ideas clear. The main criticism that has been levelled against by book is that it was too late in the day to preach the doctrine of *laissez faire* and free trade especially when even England, the most ardent champion of these doctrines, has abandoned them. I am afraid that without the

least disposition to be intransigent, I am quite unconvinced with the arguments that have been put forward by my critics against my main thesis. Without any further apologies I think it is best if I directly confine myself to make my thesis as clear as I possibly can. I quite realise the controversial nature of the subject dealt in that book and a good deal of misunderstanding will be removed if the motive force of writing this treatise is always kept in view. I mentioned this in no ambiguous words in my preface. For the sake of clarity I repeat those words again: "The subject which is discussed in the following pages is of a highly controversial nature, and a good deal of misunderstanding is bound to arise if the motives of the author are not taken into consideration. The chief motive which has impelled me to undertake this work is my desire to bring to the notice of my countrymen the changes which the post-war European economy is undergoing, how far the policy of economic nationalism has been fostered, and what might be its effects on our exports."

The chief criticism that has been levelled against my book is that it is now too late in the day to argue the case for free trade and "let alone" policy. Personally I too believe that under the present circumstances when the feelings of economic nationalism are so strong, the tariff barriers are so unsurmountable and the state control in so many countries is so rigid, it will be a folly of the first magnitude for any practical man to advise a country to adopt a policy of "let alone" and free trade. Now I may be pertinently questioned that if I also personally believe what I have just written how or why on earth am I to defend my thesis. I have also been blamed to be inconsistent in the same book by advocating a policy of non-intervention in one part of the book and advising closer economic relations with the British Empire in the other. This seems to my critics the weakest part of my book, while, on the contrary, I think this is the strongest point of my thesis. Now I shall endeavour to my best to reconcile these two apparently conflicting notions.

In order to appreciate my thesis I shall only ask for one favour from my readers, and that is, that they should keep in view that the book has been written by an academic student of economics and not by a politician. The

conflict in my views is purely due to my being realistic and not ignoring the things as they are.

In the first part of my book, I have examined *purely from the theoretical point of view* the advantages of *universal* free trade and *laissez-faire* economy and showed its advantages with the nationally controlled economy. I am sure few will dispute with me that if for one moment we suppose that all the countries of the world willingly and honestly are prepared to remove all barriers to trade, capital, and men, and the world economy is based on territorial division of labour, the world, as a whole, will be economically better off than it is at present under conditions of control and restrictions. All the principal laws of economics are based on this assumption. The main function of economic analysis is to enable us to understand properly the various aspects of a given situation. We study how to make the best use of our resources and to derive maximum marginal utility from those. The economic analysis shows that, under conditions of universal free trade and the "let alone" policy, the goal of maximum marginal utility could be achieved with the least amount of sacrifice. It may be said that this is too theoretical an assumption the parallel of which ever hardly existed in this world. But even taking the world as it was before 1914 with less economic restrictions than there are to-day, we find that the world, on the whole, was better off economically than as compared with the world of to-day. I took pains to point out that the results of state intervention in economic life have not been so glorious as their trumpeteers would make us believe. The following quotation from the *World Economic Survey* may be read with some benefit:—

"Despite the recovery so far achieved, unemployment in 1934 was still more than double that in 1929. If the absorption of the unemployed should continue during the current year at the same rate as in 1934 the amount of unemployment in the world with production back to the 1929 level, would still be 75% greater than it was then. Yet the conclusion is irresistible that, until significant expansion of international trade is achieved, there will remain, despite substantial recoveries of national production, a 'hard core of unemployment' in practically every industrial country."

It has been said that the system of *laissez-faire* has been responsible for the present chaotic condition of the world. I maintain that all the present national consciousness, and the increasing tendencies towards autarky are responsible for the present chaos. Only international free trade can bring lasting peace to the world. In a *real and honest system of international trade* politically dependent countries have no values and the chances of world conflict are greatly lessened, at least all the economic causes of war are removed. At least in one important respect there is no difference between capitalism and socialism in that they both believe in universal free trade. In socialism there is a world state with no national barriers either for the movement of goods, or men or capital. In the capitalistic system there may be a number of states, but their governments are expected to maintain law and order and to leave other things alone. It may be said that such a simple state of affairs, has never existed before, and it is futile to hope for its establishment in the future. This may not happen but, as economists, it is our duty to show the advantages of one system over the other. I for myself confined my studies to showing that the policy of state intervention, at least of haphazard state intervention, especially in a capitalistic system, has not been successful. It was with this end in view that I warned my countrymen that a good deal of disillusionment and dissatisfaction are bound to come to those who have pinned too much faith on the magic power of the state. Theoretically speaking, the system of free trade and *laissez-faire* is far superior to the policy of state intervention and economic control. Just as, morally speaking, self virtue is much better than imposed virtues. But just as no moralist who lives in this human world can ignore the human weaknesses, so no sensible economist can ignore the weaknesses of the state. If we find that our ideal system is not working smoothly and others are not playing the game fairly, we have to defend ourselves. The advantages of playing a fair game could only be secured when everybody was playing fair. A person would be more than simple who insisted on playing fair when everybody else was playing foul. It was with the consciousness of this realisation

that in the world situated as it was, I considered, it was in the best interests of India to follow a policy of closer economic relations with the Empire. My belief is that if one has to choose between two evils, he should choose the lesser one.

I did not advocate that our industries should be left to the ruthless forces of competition as I have been misunderstood to have advocated. All that I said was that in view of the changed technique of economic warfare protection no longer was an adequate weapon to fight with and protection alone will not solve the difficulties of our industries. Although I pointed out at some length the disadvantages of state control but not for one moment I advocated a policy of rugged individualism. On page 187 I wrote, " In the previous pages more than once we have pointed out the dangers of state control but it should not create an impression on the readers that we are entirely against any interference by the state. There are certain functions for which the state is very much suited and the results achieved would be very desirable. In regard to developing India's industries I pointed out in my preface that our industries stand more in need of better trained labour, better internal organisation and scientific management, of better facilities for marketing, than *just an artificial* protection from foreign competition." Again on page 187, discussing the problem of Indian industries, I remarked, " It is all the more desirable that the state should follow the persuasive policy and should create facilities for industrial education, and create some Advisory Boards for advising Indian industries. I am sure if proper attention is devoted in this direction we can *dispense with high tariffs to quite a considerable extent,* and achieve the desired end." I would like my readers to specially note the words, " dispense with high tariffs to quite a considerable extent." My view will be better appreciated if the following lines on the same page are read with this, " if certain industries are in need of help, especially the key industries, it is more preferable that they should *directly be subsidised by the state.* The policy of subsidising is certainly preferable to a policy of protection. In the case of subsidising better control can be exercised and the accounts can

be watched more carefully than in the case of protection. Unlike protective duties it is not regressive in its incidence and its burden is not inequitable. The public is more likely to take a keen and intelligent interest in industrial matters when it knows the amount of subsidies given than under the system of protective tariffs. I fail to understand why Mr. Karve thinks it difficult to "accept the view that subsidies will be less regressive in their incidence than tariffs."

For a healthy development of industries in India, I advocated that, "in my opinion the future policy of India should be directed towards developing medium-sized and small-scale industries rather than large-scale industries. There are various industries that are connected with agriculture which could be developed. This will not only rapidly industrialise the country but will also provide a subsidiary occupation to our farmers who find that they cannot fully employ their time in agriculture. There is no reason why we should not develop a dairy industry, a fruit-preserving and fruit-canning industry. Jam-making and various other allied industries might be started. I think, if proper steps are taken we can easily export these products to various other countries. The future salvation of India lies not in developing a few large-scale industries in one or two provinces but in encouraging small industries all over the country."

So far I have only attempted to clarify some of the points, and I have tried to show that at no stage did I believe either in the absolute policy of "let alone" or in not developing the industrial resources of this country. I have shown that even for the industrial development of the country the help of the state is necessary and I advocated the policy of active help by the state in the form of subsidies. Now, two other points remain to be discussed, *viz.*, the control of prices and economic planning.

Control of Prices

I shall mention the problem of control of prices very briefly as I have discussed it at some length somewhere else. The longest chapter of my book was on control of prices in which I examined various schemes of price control in some

of the leading countries of the world and my conclusions were that it is very difficult to control prices in the long run even by the most autocratic national government. The truth of this is being well realised by various provincial governments of India who have been trying to control the prices of some commodities since the war. In this connection I am tempted to quote Sir William(?).

"Price is like a thermometer, and if you combine it with competition you get something like a thermostat—a more or less automatic regulator of the economic mechanism, encouraging production of things for which there is an effective demand, discouraging production of others, serving the comfort and convenience of consumers. But if one is to use it in that way, it is essential to give the regulator a chance. An economist's chief complaint against the world to-day is that the world at large is playing with prices and not allowing their regulator to function. The Americans have a story about a man who went into a room and looked at the thermometer which was somewhere well below freezing point. "Gee," he said, "it's cold," and put his thumb on the bulb and sent the mercury up to summer heat. Then he took off his coat and died of pneumonia. I sometimes wonder whether some of the people who think pushing up prices is a royal road to prosperity know more about the economic system than that man did about thermometers."

Therefore, I advocated that economic forces should be left to themselves. Mr. Lokanathan observes, "if this view be correct, it ceases to be interesting to a people faced with the difficult day-to-day problems. Fortunately, it is not correct." I fail to understand why this view is not correct. I quite realise as Mr. Lokanathan has pointed out that certain forces have come into operation which do not allow the economic situation to work smoothly, but who is mainly responsible for those forces? In the post-war period we have seen the amazing jugglery of politicians and others in the form of various ill-conceived schemes to correct the economic system which has itself been poisoned by their own doings. I quite realise also that, at present, it is hardly possible to think that the world will be prepared to allow the economic forces to adjust themselves. But this does not mean that we cannot argue and prove theoretically the advantages of *laissez-faire* economics with government economics. It is very often misunderstood that the advocates of *laissez-faire*

did not favour any action or interference by the state. This is far from the truth. Positive interference by the state was recommended by Adam Smith and others against monopolies and other such restrictive combinations. I like to point out with the utmost force at my command that nowhere in my book did I advocate that the state should not do anything or in no circumstances whatsoever state interference was desirable. On the contrary, I definitely pointed out on page 187, that "*there are certain functions for which the state is very much suited* and the results achieved would be very desirable." I have further developed this thesis in my *State Banks for India*, where I have shown that, in the field of banking, state action is more desirable than the private individualistic action. The state has a special responsibility towards controlling the banking system and I have quoted no less an authority than Adam Smith in support of this view.

Economic Planning

Almost every reviewer has disagreed with me in regard to my chapter on economic planning. I have given my utmost consideration and careful attention to the points raised by the reviewers, but I must say with due regard to modesty and without any disposition to be intransigent that as far as these observations are concerned, I am quite unconvinced. As a matter of fact, I regard that the full implications of economic planning have not been properly understood by most economists in this country. This apparently seems rather a strong charge, but I am quite prepared to defend it. As economic planning is the burning topic of the day and divergent views are being expressed on this subject, I shall deal with the matter at some length. Before I proceed to answer some of my critics I would like to state my views as clearly as I possibly can. In my preface to the book I pointed out, " what is popularly now called planning is nothing but rationalisation and scientific management and I am a firm believer in that." In Chapter 2, I pointed out not only the difficulties of economic planning but also the fundamental difficulty as to what we mean by planning. I pointed out that "it is very difficult to give any exact definition

of planning which would command universals acceptance. Different individuals are using it in different sense." I have been confirmed in this view by the different ways in which the different reviewers have understood planning or would like to plan. For instance, Mr. Bhatnagar would like to " plan for the nation as a whole and yet within the framework of that plan leave sufficient scope for individual liberty and individual initiative to have the fullest possible way." But what would happen if individual liberty conflicts with the national plan? In a system of perfect planning I have pointed out that individual interests will not only have to be sacrificed but ruthlessly slaughtered to the wishes of the central planning authority. Take for instance, Russia's system of economic planning. There by planning is meant an absolute and complete surrender of individual rights and judgment in production, distribution, exchange and even in consumption to the supreme will of the state which guides the destinies of the nation on a plan prepared beforehand to which every individual must submit. You may be accustomed to eat wheat bread, but the state planning may think that in their system of planned economy more wheat should be exported and less consumed at home and the consumption of rye or other cereals is to be encouraged. You have then got to dispose of your wheat according to the instructions of the planning board and be content to eat rye whether you like it or not. This is the extreme form of planning which is carried out in Russia. Mr. Bhatnagar does not like this sort of planning. He observes, " that if in the name of general good the individual is to be reduced to the position of an automaton, in short, a slave of the central bureaucrats, then that planning with all its attendant efficiency in production is not worth having."

Mr. Karve believes that, " our object must certainly be planned and regulated industrialisation." Mr. Lokanathan observes, " that a new way has to be found by which the abuses of the old system and the dangers of government planning may both be avoided." He further realises, "to construct such new framework is undoubtedly a difficult task but it is dangerous to ignore, as Dr. Qureshi does, the true nature of the problem which faces the world at the present

moment." I shall presently deal with the problem raised by Prof. Karve. In reply to Mr. Lokanathan's criticism I would like to make the following observations:

It is said that economic mechanism no longer works smoothly and it is necessary to adjust it by means of planning. But one may ask pertinently why is not the economic mechanism working as smoothly as it was before the war? The advocates of planning say that this friction is due to the inability of the present competitive system to adjust itself to the changing circumstances. But the question arises as to how the circumstances have changed and who has been responsible for the change? The present depression is the result of two forces: (1) That in the post-war period political interventions have been working in restricting the economic mechanism from functioning in its broadest sense, and (2) that these tendencies are mainly, if not entirely, the result of that policy. "Now there can be little doubt," writes Professor Robbins, "that in the post-war period the capacity of the economic system to sustain shocks to adapt itself to a process of rapid change has been, as a result, impaired. The essence of pre-war capitalism was the free market . . . . in the sense that the buying and selling of goods and the factors of production were not subject to arbitrary interference by the state or strong monopolistic control . . . . Since the pre-war period it has tended to become more and more restricted." "The cartelization of industry, the growth of the strength of the trade unions, the multiplication of state control have created an economic structure which is certainly much less capable of rapid adaptation to change than was the older, more competitive system."

The elements of rigidity and instability are the outcome of the policy of state intervention. How far planning will help to lessen this rigidity and instability is a question which we shall examine now. Planning, if it is to be successful, will have to be entrusted to some central authority and this involves a high degree of centralisation. If any system of industrialism is to be successful, it is necessary that there should be scope for free adjustment and free enterprise, and the controlling authority should be able to take immediate

and speedy action. Anybody who has the least experience of bureaucratic measures of control knows how rigid and inelastic these bodies are and how much red-tape is involved in doing even the most elementary business with them. The rigidity and inflexibility that are the two distinguishing features of the post-war depression period have been brought into existence by state intervention in various countries. The system of capitalistic enterprise has not failed because of any of the inherent defects in the system itself but because of the ill-conceived measures which have been adopted to set it right. Post-war economic tendencies have seriously obstructed this mechanism. "Wage rates have lost flexibility, the freedom of markets has been obstructed by cartels and monopolies frustrated by state policy, restrictions have been imposed on the exchange of goods and services between countries, individual countries have promoted control and bounty schemes,—these are the tendencies and policies which have caused a temporary breakdown of the prevailing economic system." "If recovery is to be maintained and future progress assured there must be a more or less complete reversal of government regulation of enterprise. The aim of government policy in regard to industry must be to create a field in which the forces of enterprise and the disposal of resources are once more to be governed by the market."

Now let us examine Mr. Karve's proposition regarding planned and regulated industrialisation in this country and see how far this could be put into practice. Mr. Karve believes that "we cannot now escape from the natural demand of the present state of capitalism which is social control." He further observes, that "this need not, in fact, ought not to, make the end of legitimate individualism. With a socially inclined individualism we can secure the energy of private initiative and the justice of social union." "Through co-operation as much as through other mixed forms of economic activity that are being daily created the best of both the systems may be secured in so far as the pressure of events permit."

If Mr. Karve's goal of planned and regulated industrialisation could be secured through these means, I quite welcome his suggestions. But I am afraid Mr. Karve very

much under-estimates the requirements of planned and regulated industrialisation. In India the conflict between various interests is so colossal that it cannot be solved by private initiative and at the same time enable us to achieve the end of planned and regulated industrialisation under the capitalistic system.

Most of the reviewers contemplate the system of planned and regulated industrialisation in India under a system of private capitalism. If they had advocated such a system by abolishing capitalism and individualism in this country and had recommended a system of socialism in this country, I would have agreed with them theoretically. But to hope for planned and regulated industrialisation with state control in private hands is a contradiction in itself and we cannot achieve lasting results in the long run. Twenty years ago when we adopted the policy of protecting our industries everybody welcomed it, but most of us were slow to recognise its full implications. And those industrialists who so ardently advocated it on grounds of national welfare are not prepared to accept all its logical consequences. What are its logical consequences? (1) The state intervenes. (2) The level of tariffs is raised. (3) To begin with, the cost to the consumers generally increases. (4) If protection is given to a number of commodities, especially consumption goods, the cost of living increases. (5) If protection is given to production goods, the cost of production increases which hampers our exports or at least decreases the competitive position of our exporters. (6) It benefits the producers of those goods, the imports of which are protected. It has often been said that once a protection is given to an industry it is very difficult to take it away. Let us see how it happens. The protected industry is placed under a special privileged position in regard to the sale of goods produced by it. If a protective duty of 50% is levied on the import of a commodity it means that the cost of producing that commodity is probably 50% more as compared with other exporting countries. Or later on when such an industry gains experience it begins to produce at lesser costs and more money is available to distribute to its shareholders as profits. How many mill-owners are prepared to share these profits

with the government? Even to-day we find that a great hue and cry has been raised in this country against the taxing of war profits which are not at all due to any efforts of the mill-owners. At the same time we find that there has been a phenomenal rise in the shares on the stock exchange due to expectation of high profits. In December last when I went to Bombay to attend a meeting of the National Planning Committee, I went to the Stock Exchange and asked some friends as to why the prices of shares of cloth mills were rising. Personally, I could see no reason for the rise of prices of these shares considering the existing condition of the mill industry. I was told that my observations were quite correct but the shares were rising in expectation of the prolongation of the war and a further rise in the price of the mill cloth. Now suppose the war terminates. What will be the fate of the cloth-mill industry, especially of its share-holders? Suppose before the declaration of the war the price of a mill share was Rs. 100 and the mill was declaring a profit of 5%. Now owing to war boom the mill earns huge profis and decides to declare a dividend of 15%.If the rate of interest on other equally good securities does not rise above 5%, the share of this mill is three times as valuable as compared with other securities. Consequently, the price of this share may rise up to Rs. 300. There will be a number of people who buy these shares at Rs. 300 instead of Rs. 100 and will be equally well-off as compared with holders of other securities as long as the rate of dividend remains 15%. But what happens when the war terminates? The closing of the last great war tells us this. There was a serious fall in the profits. A shareholder who had purchased a 100=rupee share for Rs. 300 now got 5% profit, which means that while previously he was getting 5% on his capital, now he got even less than 2%. Naturally this is a bad investment now. It reflected the bad condition of the mill industry and consequently a clamour was raised to save the industry from collapse and ruin by adequately protecting it. When the state had once interfered to protect the industry the natural and logical consequence is not only to control the profits payable to the shareholders and to fix a statutory limit to the appreciation of the shares, but

also to participate in the excess profits earned above the maximum.

Just as the government had intervened to protect the mill-owners, it is also desirable that it should intervene in the interest of labourers to fix a maximum (?) wage which should allow not only for necessaries of life but also for conventional necessaries and some comforts. If the mill-owners are found to be inefficient, the logical consequence of state intervention will be that the state itself should undertake productions. Thus the furthest consequence of state intervention is state ownership and socialisation of the means of production.

Are our planners prepared to go so far? Are the mill-owners in India, who have been yearning for state intervention on their behalf for granting them protection, saying that such intervention was in the interest of the country, prepared to welcome the action of the state in regard to limitation of profits, social insurance minimum wage and other such allied problems. If the answer to these problems is in the affirmative, I support state intervention wholeheartedly. But, unfortunately, there are no signs to show that the answer is likely to be given in the affirmative.

The Congress governments during their short régime have done very little to exercise any control in the industrial field. But even the very little that they have done is being looked upon in industrial circles with apprehension. They cannot both eat their cake and have it. Either they should be left to their own fate or they should be prepared to submit themselves to the proper control of the state. My opinion is that effective planning is not feasible under the capitalistic system.

Planning for India

If planning is to achieve any success, the Planning Authority must be in possession of up-to-date information and knowledge about all aspects of economic life, and must also be able to use this knowledge. Detailed data should be available about the state of existing production and trade, the distribution of income between the different classes of

the country, the organisation of industry and its technical equipment; the composition of its population, its geographical distribution, and the trend of changes. These are some of the few most important subjects about which detailed information must be available. And above all, the Planning Authority must possess a very high degree of administrative skill and should be able to use the data properly. The planning of one family's affairs is not by any means an easy job, and when it comes to planning the natural resources of the country, it appears to be a superhuman job. The question of planning the economic resources of India under the present system is out of practical politics altogether. Planning, in its broadest sense, could only be undertaken in countries where the means of production are collectively owned. Planning under the capitalistic system where means of production are owned individually and the Central Planning Authority has no control over them is not possible and any planning measures undertaken in a system of capitalistic enterprise are doomed to failure. In the system of capitalistic enterprise, production is undertaken with a view to individual profit and firms cannot be compelled to take any action which may not be of direct gain to them. In such a system conflict is bound to arise. Another practical difficulty which a Planning Authority will have to face in India is the lack of any reliable data and the inavailability of statistics about even the most vital subjects. Another difficulty is the impossibility of adequate economic calculations. This difficulty arises because of the absence of any definite measure to the wants of consumers. The Planning Authority before making its programmes for production must have some sort of idea as to the ultimate end of production. If the final end of production is consumption, it becomes necessary that we should have some agency at our disposal to find out the exact needs of the consumers. If the consumers are left free to make their own choice they will upset the planning, as individual tastes differ, while on the other hand, if we assume that no freedom of choice is left to the consumers then planning means tyranny of the first magnitude. It will be a superhuman task for the controlling authority to determine in any precise manner the

demand for certain goods and in the execution of such planning great friction is bound to arise. This friction would be greater if, due to natural and seasonal variations, the output of agricultural products does not come any nearer to the calculation of the Planning Authority and the repercussion of such a change would be very wide. When the supply of raw materials decreases it will affect industrial production and the industrial production would upset all other calculations.

Another difficulty in planning, in a system where there is no estimate of the cost of production and the relative advantages of various alternative ways of production, is that no calculations can be made regarding the cost of production and the economic efficiency of the system. For instance, taking the case of agriculture and the employment of machinery, we have to consider whether the use of a tractor is more economical or whether human labour can do the same task with lesser costs. "The best tractor may not be an asset and the capital invested in it is a sheer loss if the labour which the tractor replaces is cheaper than the cost of material and labour which goes to make a tractor *plus* interests."

Those of us who in India are accustomed to think that planning has achieved wonderful success in Russia should read with some interest the following remarks of Mr. Lewis Fisher who is a very favourable critic of the Russian system. He says: "Generally speaking, when production in a city and village has registered tremendous progress, distribution, however, is in a mess. Part of the difficulty is a bad freight transportation by land and water but the trouble goes much deeper. Goods lie in ware-houses and rot while the consumer searches for them in one store after another. Widespread conflict and endless red-tape bureaucracy are aggravated by equally widespread speculation and the venality of petty officials. The Soviet press regularly prints details of the misdemeanours of the store-managers and the co-operative employees. But the cancer remains."

What do we want to plan for?

Those who advocate planning must clearly state their idea. What is the ultimate goal of planning and why do

we want to plan? Apparently, these questions look absurdly simple, but when you come to answer them the task is not so simple as it looks. The real difficulty of planning arises when we confine our attention to the details of any industry and still greater difficulty arises in executing our plans. But of all questions the most important one is: Who is to be entrusted to carry out the work of planning and whose decisions are to control the resources and the destinies of the nation? I have laid stress on this point because these decisions and their execution is a matter of vital importance. A slight mistake will cause great disturbance and will impose severe hardship on the nation. We must clearly understand and properly appreciate the implications that are involved in planning and we must not base our ideas on mere prejudice or ignorance or on the sudden popularity which planning has achieved during recent years. Another fundamental difficulty which one has to face in making up one's mind about the real worth of planning, is that theoretical promises of planning and the actual experiences gained from them seldom tell the same story.

The Present System of Unplanned Economy

The present system of capitalistic production has been condemned as chaotic and planless. But is the system really planless? Is it haphazard? Have we derived no benefit from the system? Has it outlived its usefulness? The simple answer to these questions is that during the last hundred years we have made tremendous progress under this system—a progress which is almost unprecedented in the previous history of the world. The standard of living has increased hundredfold. Things which are considered absolute necessaries of life, were considered great luxuries a hundred years ago, and some of them were not available even to many monarchs. The world, which has always been living under the shadow of scarcity is now almost immune from it. Science has solved the problem of production and has created a better world for man to live in. No doubt the problem of distribution has become an acute one, which is due to the maladjustment in the system of distribution and on

this account the present system of capitalistic production is condemned. But we must remember that it is a recent phenomenon. Even thirty years ago the problem of production was more important than the problem of distribution. As production was not adequate, the question of distribution did not become very serious. During the last few decades the capitalistic system has been striving to increase production, and it has had time to think of distribution. Now that the problem of production has been solved to a considerable extent, attention is being devoted to the thorny problem of distribution. It is easy to condemn a system, but it is not so easy to provide something better in its place. Those who ceaslessly condemn the present capitalistic system must bear this important observation in their mind. The allegation that the present system is chaotic and planless does not bear close scrutiny. It is true that there is no central authority which compels people to listen to its dictates and chalks out a programme for them; but the mechanism of the price system and the laws of supply and demand act as omnipotent guides. The plea that the laws of supply and demand do not work in the classical sense in this disturbed world, and that the price mechanism is no guide, is true. But whose fault is it? Certainly it is not the fault of the system. This delicate system has been severely tempered with by politicians in various countries who want to achieve national self-sufficiency, and it is such countries which are enthusiastic advocates of the planning system.

It has become fashionable these days to speak of the dilemma of "poverty amidst plenty." It is alleged that this is due to the inherent defect in the capitalistic system. But is it? There is scarcity amidst plenty because of the chaotic effects of increasing State intervention in economic life, due to the crazy idea of economic self-sufficiency. If wheat is rotting in a certain country and there is no demand for it, there are certain other countries which though not climatically suitable for the production of wheat and unable to produce the commodity at any competitive price, are madly endeavouring to increase their production, and are offering very high prices for the supply of wheat to their own nationals by prohibiting foreign imports. Whose fault

is it? Who is creating scarcity amidst plenty? If Germany and Italy are planning to increase their wheat supply, which they cannot produce as cheaply as other countries like Canada and United States, and if this is the criterion of planning, then Heaven help the planned world!

I am not against planning but against haphazard planning as practised in some countries to-day. If the aim of planning is to really increase the national standard of living such a step is to be very much welcomed. As the main object of the Indian National Planning Committee is to increase the standard of living of India's teeming millions I very readily accepted to serve on it. National Planning in India cannot fully succeed without international economic co-operation, or at least the best results cannot be achieved without such co-operation. Again, India's position in regard to national planning is very much stronger than that of most other countries of the world, as India is not a country but almost a continent. Therefore, I believe that even if international economic co-operation is not forthcoming (as I see very faint chances of its coming in the near future), we can embark on a wholehearted programme of economic planning on a socialistic basis. I agree that capitalism, owing to the present world situation, is a dying horse, but I do not agree with those who advocate its revival through capitalistic planning. If a planning is to succeed, it must be whole-hearted and thorough, and must embrace all aspects of life and work including the planning for our population.

THE BOMBAY INDUSTRIAL DISPUTES ACT, 1938

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The Bombay Industrial Disputes Act, 1938, marks a great step forward in the direction of securing a "peaceful and amicable settlement of industrial disputes by conciliation and arbitration." The importance of such legislation cannot be over-emphasised in view of the wastage caused by strikes and lock-outs. Apart from the extreme suffering which they cause to the labouring population, these methods are grossly wasteful from the point of view of the community at large and have an undoubtedly unsettling effect on industry as a whole. Any attempt, therefore, to prescribe a compulsory reference of all industrial disputes to conciliation before resort is had to methods of industrial warfare, must be welcomed by all.

The Bombay Industrial Disputes Act, 1938, has for its models the Canadian and Australian laws—more particularly the latter, and such modifications as are introduced have been designed in view of the peculiar circumstances of the province. The Act provides for compulsory conciliation of all industrial disputes, except where there is an agreement to refer the matter to arbitration. In order to secure this end, it provides, *firstly*, for an elaborate conciliation machinery, consisting of a Chief Conciliator, local and special conciliators, an *ad hoc* Board of Conciliation and a permanent Court of Industrial Arbitration. *Secondly*, it lays down a definite procedure of conciliation (and arbitration) to be followed by contending parties. *Thirdly*, in order to guarantee effective representation of the viewpoint of the employees during these proceedings, provisions regarding recognition and registration of trade unions have been introduced and the term, " Representative of Employees," has been clearly defined. *Lastly*, strikes and lock-outs before

the commencement or completion of these proceedings have been declared illegal. A detailed examination of these provisions is attempted in the section below. The next section contains a critical estimate of those provisions.

I

(1) Conciliation Machinery

The Commissioner of Labour of the province is made *ex-officio* Chief Conciliator with jurisdiction extending throughout the province. Below him are Conciliators appointed by the Provincial Government for prescribed local areas; the Provincial Government may, by notification, appoint any person to be a Special Conciliator for any local area or industry or any particular industrial dispute or class of disputes. There is also a provision for the appointment by Government of a Board of Conciliation consisting of a Chairman and an equal number of members selected by the Provincial Government from panels of persons representing the interests of the employers and the employees respectively. The chairman and the members of the Board shall be independent persons. A Court of Industrial Arbitration is provided for determining industrial disputes, for hearing appeals from certain decisions of the Registrar of Trade Unions and the Commissioner of Labour and for certain other purposes mentioned in the Act. It consists of two or more members not connected with any industry and eligible to be appointed judges of a High Court.

(2) Compulsory Conciliation

The central principle, on which the Bombay Industrial Disputes Act, 1938, is based, is that of *compulsory* conciliation as contrasted with voluntary conciliation prescribed and facilitated by the Trade Disputes Act, 1929, and the Bombay Trade Disputes Conciliation Act of 1934. These earlier measures, embodying no coercive elements, have remained largely unused, while the community has been reaping the usual crop of industrial disputes. The present Act is not, therefore, a continuation of the old policy based

largely on the dictum of *laissez-faire*, but is a deliberate and bold departure in the direction of active state interference in the interests of industry in general and labour in particular. The following procedure of conciliation is prescribed by the Act:—

> Every employer in respect of any industry or occupation, to which the provisions of the Act are made applicable, shall, within two months of the date of such application, submit to the Commissioner of Labour standing orders regulating the relations between him and his employees. The orders are to be settled by the Commissioner of Labour after making due enquiry and are then to be registered. Any person aggrieved by any of the standing orders so settled may appeal to the Industrial Court which may confirm, modify or rescind any standing orders settled by the Commissioner of Labour.

Once settled, the orders are not to be altered for a period of six months. Thereafter, any party demanding a change in the standing order is to give due notice to the other party and send copies thereof to the Commissioner of Labour, the Registrar of Trade Unions and the Labour Officer. If during fifteen days from the date of the service of the notice, an agreement between the parties is arrived at in regard to the proposed change, the agreement is registered, but if no such agreement is forthcoming, a full statement of the case is to be forwarded to the Registrar, the Chief Conciliator and the Conciliator of the local area. The Conciliator of the local area will then hold conciliation proceedings. It shall be the duty of the Conciliator to endeavour to bring about a settlement of the industrial dispute and for this purpose the Conciliator shall enquire into the dispute and may do all such things as he thinks fit for the purpose of inducing the parties to come to a fair and amicable settlement of the dispute and may adjourn the conciliation proceedings for any period sufficient in his opinion to allow the parties to arrive at a settlement. At any stage during the proceedings, the Chief Conciliator may himself intervene

or direct a Special Conciliator to do so. If as a result of the conciliation proceedings a settlement is arrived at, it is to be registered and published; if however, no settlement is reached, a full report setting forth the steps taken by the conciliating authorities and stating reasons on account of which settlement, in their opinion, could not be arrived at, is to be submitted to the Provincial Government. The Government is bound to publish this report unless it deems fit to refer the matter to a Board of Conciliation, in which case the report of the Board is to be published by the Government, whether a settlement is arrived at or not. The Government is bound to appoint such a Board even at an earlier stage, if both parties to the dispute so desire. If, notwithstanding these efforts at conciliation, the parties are unable to come to any agreement, they resume their liberty to resort to the usual methods of industrial warfare, namely, strikes and lock-outs.

(3) Voluntary Arbitration.

The Act grants exemption (under certain conditions specified below) from resort to conciliation proceedings wherever there is an express written agreement between the employer and a *Registered* Trade Union[1] to submit any present or future industrial dispute or any classes of such disputes to the arbitration of any person who may be named, or if no name is mentioned, to that of the Industrial Court. Thus agreements to submit to arbitration are entirely of a free and voluntary character; but such agreements are required to be registered and become irrevocable, provided that the 'submission' to refer *future* disputes to arbitration may at any time be revoked by either party giving six months' notice.

Whenever there is such an agreement, no conciliation proceedings shall be commenced *if*

(a) the *majority* of the employees directly affected by such dispute are members of a *Registered*

[1] For the meaning of a Registered Trade Union see the next sub-section.

Trade Union which is a party to such submission, or

(b) *some* of the employees directly affected by such dispute are members of a *Representative*[2] Union which is a party to such submission.

The award of the arbitrator as to be published and is binding on both parties.

(4) Registration of Unions

The Act defines a *Union* as a Trade Union (other than a Union formed for the purpose of regulating the relations between employers and employees) registered under the Indian Trade Unions Act, 1926. Unions are then classified as Occupational or Industrial. An *Occupational Union* means a Union the membership of which is confined to employees employed in a particular occupation or group of occupations in any industry and an *Industrial Union* means a Union the members of which belong to any industry generally and which is not an occupational union.

Any union, recognised by the employer and having had for a continuous period of six months preceding the date of the application a membership of not less than 5 per cent of the total number of employees in that industry or occupation, as the case may be, is entitled to be a *Registered Union*. If there is no recognition from the employer, the Union has to show 25 per cent membership to entitle itself to registration. The Registrar is not to register more than one union in respect of that industry or occupation in a local area and where two or more Unions fulfilling the conditions necessary for registration apply, the Union which has the largest membership is alone to be registered.

Any Registered Union which has had for a continuous period of six months a membership of not less than 25 per cent of the total number of employees in that occupation or industry acquires the status of a *Representative* Union.

[2] For the meaning of a Representative Union, see the next sub-section.

Thus any Union which can get itself registered without the recognition of the employer will automatically become a Representative Union, since it has to show 25 per cent membership to secure its registration.

In order, however, to guard against an unhealthy and *mala fide* growth of unions, the Act requires the Registrar not to register any union if he is satisfied that the application for registration is not made *bona fide* in the interests of the employees, but is made in the interests of the employer. Besides, if at any time any union applies to the Registrar that it has a larger membership than an existing Registered Union, the Registrar after holding an enquiry *shall* cancel the registration of such Union and *if* the new applicant Union itself satisfies the conditions necessary for registration, he shall register that applicant Union. Thus a Union may secure the cancellation of registration of another Union though it may not itself be entitled to registration. The registration of a union may also be liable to cancellation for several other reasons, the most important among which is that it fails to maintain the minimum percentage of membership which had entitled it to registration.

If in any local area there is no Registered Union in respect of any industry or occupation, a Union which has had for a continuous period of six months a membership of not less than 5 per cent of the total number of employees in any industry or occupation may be declared by the Registrar to be a *Qualified Union.* Every Registered or Qualified Union shall submit to the Registrar periodical returns of its membership.

(5) Representative of Employees

Having provided for different kinds and classes of Unions, the Act then prescribes the following person or persons who would be entitled to function as Representative of Employees, during conciliation proceedings, under different conditions, set out below:—

If there is a *Representative* Union in any industry or occupation and if some (not necessarily majority or all) of the employees directly affected by the dispute belong to that

union, then that Representative Union; but a union which is only Registered but not Representative can be Representative of Employees only when the *majority* of the employees directly affected are members of that Registered Union. But if none of these conditions is satisfied, the employees are to be represented by such persons, being not more than five, as may be elected by the employees from among themselves.

In cases where such representatives are not elected, the Labour Officer appointed by the Government may represent the employees, provided that before entering into any agreement with the employer he is to place the terms of such agreement before a meeting of the employees concerned. A majority decision arrived at at such a meeting would finally decide the acceptance or rejection of such agreement.

A *Qualified* Union, though not assigned any definite status in this behalf, is entitled *to appear in* conciliation proceedings, if the *majority* of the employees directly affected are members of that union.

(6) Illegality of Certain Strikes and Lock-outs

All strikes undertaken before the settlement of standing orders or before the expiry of six months from the date on which such standing orders came into operation, or without giving notice or before the completion of conciliation proceedings, etc., are to be declared illegal. Strikes are also illegal if they are commenced after the expiry of two months after the completion of conciliation proceedings. Thus the right to strike, though not taken away, is rigidly confined to a definite period of two months after the completion of conciliation proceedings. Any strike commenced before or after that period is illegal. The right of the employers to declare a lock-out is subject to exactly the same restrictions.

Heavy penalties are provided for the declaration and continuance of illegal strikes and lock-outs. Those instigating or inciting others to take part in, or otherwise acting in furtherance of, such illegal strikes or lock-outs would also render themselves liable to punishment under the Act.

II

In the above section a summary of the main provisions of the Act has been given. We shall now attempt to make a critical estimate of the probable effects of this legislation. It may be noted that the Act has already been applied to the cotton textile industry in Bombay Province and the silk industry in the city of Bombay. The Court of Industrial Arbitration consisting of three high judicial officials of the government has also been established and conciliators labour officers, etc., have been appointed. The standing orders are now being settled by the Commissioner of Labour and the Industrial Court. Temporarily there is a lull in the strike activity; at least for six months after the standing orders are settled, there can be no question of change and thereafter there would be no strikes during the pendency of conciliation proceedings. Considering that the settlement of standing orders will take quite a few months, for nearly a year and a half, if not more, the Bombay cotton textile and silk industries can confidently look forward to industrial peace.

And yet the measure was shortly opposed by some of the most prominent labour leaders in the provinces and its passage was followed by a strike in Bombay which led to very unfortunate consequences. The main grounds of opposition were the following:—

> *Firstly*, it was submitted, there was no urgent need for such legislation introducing the principle of compulsory conciliation; *secondly*, the Act was alleged to take away the right to strike, the only weapon in the hands of employees to improve their conditions of work; *thirdly*, the provisions regarding registration of unions were interpreted to mean the weakening of the Trade Union movement which is still in its infancy in this country; *fourthly*, the conciliation machinery was dubbed as capitalist and, therefore, reactionary. Miscellaneous objections were taken against other provisions, mostly of a subsidiary character. A detailed examination of the above criticism is attempted below.

(1) Why Compulsory Conciliation?

Since the basic principle of the measure was compulsory conciliation, it was no wonder that the strongest criticism should have been levelled against that. It was argued that compulsory conciliation amounted to an unwarranted interference by the state in matters which concerned two sections of the community,—the employers and the employees,—which should be allowed to measure their strength and decide their own problems. In what way, it was asked, was the community concerned or affected by strikes and lock-outs? Class warfare, being 'natural' and 'inevitable,' should be allowed to have its own way and any talk of industrial peace would only mean the maintenance of *status quo*. The employers would be only too glad to perpetuate the present conditions of work in which they 'exploit' labour. Industrial peace would, therefore, amount to the stabilisation of the present unsatisfactory position of the workers.

Secondly, it was submitted, conciliation when *compulsory* lost its true meaning and became virtually state intervention in private enterprise. Conciliation, by its nature, must be voluntary. In fact, the provisions of the earlier laws, *e.g.*, the Trade Disputes Act of 1929, were not given sufficient trial by the Government. Much good could have come out of them if the Government had willingly implemented the provisions of those Acts. Instead, a policy of evasion was adopted. After all, a period of successful voluntary conciliation should have paved the way to compulsory conciliation, but to have the latter, without the necessary preliminary period of voluntary conciliation, would be to adopt 'rush tactics' which would probably breed mutual suspicion and distrust and thereby render conciliation fruitless.

Thirdly, it was argued, labour in the province was not sufficiently well-organised in Trade Unions to be able to present its case in a systematic and quasi-legal manner before such high authorities as the Court of Industrial Arbitration. The low level of education, the infancy of the Trade Union movement and the poverty and gullibility of the average worker should have been taken into account in deciding the

advisability of introducing compulsory conciliation. If in countries like Canada and Australia the Governments have introduced this principle of compulsory conciliation, it is because of the superior organisation of labour in those countries.

Fourthly, the urgency of the legislation was objected to on the ground that such a controversial measure should have been at least preceded by more urgent measures of ameliorating the conditions of labour. Reduction in hours of work, increase in wages, better housing, safer and more sanitary conditions of work, social amenities, unemployment, sickness and maternity benefits, etc., should have been secured before the workers were confronted with compulsory conciliation and suspension of industrial warfare. After all, there were no big strikes going on so that the problem should have been regarded as one of immediate importance.

Of the arguments considered above, the first is to say the least, very strange. To deny the need for industrial peace on the ground of inevitability of class-war and to refuse to accept that the community has vital interests in peaceful settlement of disputes is not very convincing. The suspicion that industrial peace might mean the maintenance of the *status quo* is ill-founded, and could not at any rate, be taken for granted from the mere object of the Act. That it was not the intention of the framers of the Act is obvious, but whether the provisions would ultimately work out thus would be a matter of careful consideration, on which no answer could be given without a thorough examination of all the provisions of the Act. The second argument is partly defensible but the question is whether voluntary conciliation is not inherently incapable of inducing a frame of mind in which disputes are compromised. The ambitions of labour leaders, not all of whom can escape the charge of being political adventurers rarely point in the direction of peaceful settlements. In India leaders are as often made by strikes as strikes are made by leaders. Moreover, the results of the working of the Trade Disputes Act of 1929 and the Bombay Trade Disputes Conciliation Act of 1934 have not been encouraging. If anything, they have demonstrated the futility of reliance on voluntary conciliation. It

may be that a part of the blame lay on the Government, but why should a measure be so fragile as to be rendered powerless by the slightest unwillingness of the Government to implement its provisions? The consequences of industrial warfare are too disastrous for the general community—specially the workers—to allow things to drift; hence, a bold and decisive step of suspension of such activities would be of immense relief to the industry and its workers. The case for compulsion in the matter of conciliation is very strong. After all, the Government is only seeking to bring about an agreement between the parties and is not thrusting any of its own views or decisions on the parties who are ultimately masters of their own will and can choose between arriving at a fair and amicable settlement by a policy of mutual accommodation or go into the wilderness of strikes and lock-outs. Even the argument regarding the comparatively low level of organisation of labour cannot be an insurmountable obstacle, if care is taken to make adequate provision for the proper representation of employees, wherever they are not effectively organised. Moreover, when all disputes are compulsorily to be thrown open for conciliation, the labourers will have a great inducement to keep ready a well-organised union to present their case; the employers too will find it to their advantage to give recognition to such union if only to save themselves the trouble of having prolonged discussions with the Conciliators and the Industrial Court. But whether the introduction of compulsion in conciliation should have followed, and not preceded, other measures of relief to labour, is a point which does not detract from the inherent qualities of this legislation which may be judged on its own merits.

(2) The Right to Strike

Much of the labour opposition against the Act was due to the fact that compulsory conciliation implied suspension of strikes (and lock-outs) before or during the pendency of conciliation proceedings. This was interpreted to mean that the right to strike was being taken away. Much political capital was made out of this; it was argued that the strike

was the only weapon—first or last—in the hands of labour and to take away that right was to reduce the status of an employee to that of a slave who was compelled to carry on even against his will. Why should a free man be liable to penal treatment simply because he is not willing to continue to work under unfair conditions? Why should a breach contract which has no criminal intentions or consequences be made a criminal offence? The sanctity and indispensability of strikes as a method of securing improvements in the conditions of work of the employees were emphasised. But the reasoning cannot stand as it is. *Firstly*, the Act does *not* take away the right of the workers to strike; it is not only an exaggeration but a misrepresentation of the whole matter to say that the workers are being deprived of their weapon. The Act only seeks to postpone strikes till every effort has been made to conduct negotiations between the parties and explore all possibilities of arriving at a peaceful settlement of the dispute. It is true that the employees could no longer declare lightning strikes but, instead, would have to wait till conciliation proceedings have been concluded but this surely is not the same thing as being deprived of the right to strike. It is said that elaborate and dilatory conciliation proceedings may take away all enthusiasm from the workers who may no longer be in a mood to strike. Unless the iron is struck while it is hot it may not yield to pressure at all. But that would happen only where the workers had no genuine grievances and the strikes could be caused by working on their temper on minor issues. Postponement of strikes should, in the case of real grievances, on the contrary, serve to strengthen labour organisation, secure the good will of the public, make for clarification of the issues at strike and thus increase the chances of their successful conclusion. Moreover, some strikes would not be undertaken at all as their object might be achieved through conciliation. At present, the number of unsuccessful strikes is too great and that makes for great suffering and wastage; it certainly lowers the prestige and power of strikes. Under this Act, strikes will, no doubt, be fewer but they will be genuine and more often than not successful. There will not be any sudden, ill-timed or ill-advised strikes; strikes

will be less frequent but more potent; and that is exactly what the situation at present would urgently call for.

Secondly, the postponement of strikes, even though it may not be intrinsically desirable, is the logical sequel of the acceptance of the principle of compulsory conciliation. If you authorize strikes and lock-outs while conciliation proceedings are going on or before they are commenced, the requisite peaceful atmosphere and the will to arrive at an agreement would be found lacking. It is for that reason that lock-outs, no less than strikes, have to be suspended. It is true that lock-outs do not cause such immediate suffering to the employers as the strikes do to the employees, but that is no reason why the two should not, in this case, be regarded on an equal footing. To say, therefore, that the right to strike should remain with the workers even during the pendency of conciliation proceedings is to fail entirely to understand the nature of conciliation and the method of its fruitfulness. There is, however, some point in the criticism against the provision declaring strikes illegal, if undertaken after two months after the completion of conciliation proceedings. The limit of two months is regarded as too short to allow for organisation of the strikes, though it is admitted that it would be in the interest of labour to begin the strike as soon after the conciliation proceedings are over, as possible. This limit, it may be explained, has been fixed in order to avoid the occurrence of strikes on old and half-forgotten issues. There have been cases in the industrial history of this province where strikes are gone in for when the issues are scarcely remembered and there is hardly anything definite to settle. It would, however, appear, that the limit of two months is rather too short and could easily have been extended.

(3) Registration of Unions

The elaborate provisions regarding different kinds and classes of unions with varying powers have naturally aroused grave misgivings among the leaders of the trade Union movement in the province, whose criticism on this score can be summed up in the following three points:—

Firstly, the different kinds of Unions—Qualified, Registered and Representative—recognised by the Act, are likely to make for confusion and give rise to unhealthy rivalries to secure larger membership. This may lead to a split in the movement and since there is a provision for a union securing the cancellation of registration of another union on the ground of its own larger membership without its being entitled to registration, the fear of the development of 'dog in the manger' unions cannot be over-ruled. Besides, unions are to be industrial or occupational (and in the original draft of the Bill were to be vertical or horizontal) and such distinctions are not considered conducive to a growth of unity among the employees but may, on the contrary, serve to divide their ranks.

Secondly, a union with only 5 per cent membership can, by securing the recognition of the employer, be entitled for registration; whereas, without the recognition of the employer, the union has to show not less than 25 per cent membership (the percentage was 50 in the original Bill), in order to get registration. This puts an undue premium on the employer's recognition. Even in the advanced countries of the West, 25 per cent membership would be regarded as difficult to achieve; and in India it would be well-nigh impossible to secure that except in one or two major industries. This means that it will be mostly unions which secure the recognition of employers that will be registered. This may lead to the growth of dummy unions or 'Company Unions' ready to play into the hands of the employers and strike at the solidarity of the labour force. Since these unions can enter into agreements with employers they may, in effect, bind the rest of the employees more or less irrevocably. Such a development is bound to retard the growth of genuine trade unionism in the province.

Thirdly, there is no reason why only one trade union should be registered in a single industry or occupation in a local area. Due to communal and lingustic differences as also due to different leadership, it may be convenient to have two or more unions in some cases and the law should not offer an insurmountable obstacle in their formation. A minor objection was also taken against the recognition of the

so-called Qualified Unions with only 5 per cent membership and having a comparatively unimportant right of being heard in the conciliation proceedings. Whenever the majority of the employees directly affected were members of that union.

These points of criticism cannot be rejected on any *a priori* grounds. Nor is there anything in the Act which might give a direct lie to such fears. All that can be said is that the other side of the picture may also be noticed and then a conclusion hazarded. The diversity of unions is intended to secure the ultimate development of unions with a sufficiently large membership to take advantage of the rights given to a Representative Union; pending the formation of such large unions a smaller union recognised by the employer can secure some of those privileges and even without the recognition of the employer, it will have the rights of a Qualified Union. Thus while the smallest union is given some rights, the prospect of greater rights is held out to inspire the ambition of securing larger membership. That the employer's recognition should have been given so much importance as to entitle a 5 per cent union to registration is not easily understandable; the labour leaders saw in this an attempt to please the capitalists and it is difficult to disprove this suspicion. It may, however, be noticed that there are ample provisions in the Act to diminish the importance of the employer's influence over unions. In the first place, the Registrar of Trade Unions is to register only those unions which are *bona fide* in the interest of labour; so that, whenever he has a suspicion that a 'Company Union' is being formed he can refuse registration. Secondly even when a " Company Union " with 5 per cent membership has been formed there is nothing to prevent the remaining employees to form, say, a 6 per cent union and get the registration of the 5 per cent union cancelled. It is difficult to believe that while the employers can manage to secure 5 per cent of the workers on their side, the remaining ninety-five per cent will sit quiet and allow the dummy union to function. It is further expected that even if in the beginning a union is created or dominated by the employer, gradually it is bound to veer round and look to the interests of its members. This is cold comfort. In any case, it is

possible to console ourselves with the thought that the Act has not given a new power to the employers who were free to form such unions even before. Altogether, this part of the Act seems to have received less consideration than it might have; this can also be seen from the fact that the original Bill provided for 50 per cent membership to entitle a union, not recognised by the employer, to get registration. This percentage was preposterously high. In fact, even 25 per cent would be exceedingly difficult to achieve.

It must, however, be admitted that the Act has two provisions which are likely to aid in the strengthening of the trade union movement. One is the provision against victimisation. No employer is to dismiss or reduce any employee or punish him in any other manner by reason of the circumstance that the employee is an officer or member of a trade union or takes an active part in the organisation of strikes. Such legislative enactments are usually of little practical importance, since the employer can always find excuses to evade this charge, but they do have some moral effect. The second provision relates to submission to the Registrar by every registered or qualified union of periodical returns of its membership. Since the continuance of the status of a union depends on the maintenance of its membership, strike unions and such other mushroom growths would be checked, and progress, though slow, would be on sound and stable lines.

(4) Conciliation Machinery

The conciliation machinery has been characterised as 'capitalist' and therefore not fitted to appreciate the labour view-point. High officials of the Government, like the members of the Industrial Court, the Labour Commissioner, Conciliators etc., can rarely acquire a sympathetic understanding of the grievances of the working classes. The Government itself is dubbed 'capitalist' and its officers are likely to have more in common with employers who are their intellectual and social equals rather than with the workers.

How far Government officials will succeed in securing agreements, fair to both parties, remains to be seen. Their

intervention could have been rendered unnecessary by following the Canadian model of constituting a Board of Conciliation every time a dispute arose. The present Act, however, contemplated the constitution of such a Board only when the Conciliators have failed or when both parties to the dispute make demand for it. Experience alone will show whether in the circumstances of this province official or non-official agencies would achieve better results. The agency which proves less successful would naturally fall into disuse. The Act has, however, the merit of having provided for both, any of which may be adopted according to circumstances.

Conclusion

The above remarks have made it abundantly clear that while some provisions of the Act could have been improved upon, the measure is, on the whole, bound to introduce a new era of industrial peace in the province. Its probable effect on trade unionism is rather uncertain and would, therefore, be most anxiously watched. Any amendments which may appear necessary in the light of circumstances would, no doubt, be undertaken. But, the fear that 'industrial peace' would mean stagnation and the perpetuation of the present unsatisfactory conditions of labour would appear to have little foundation, since all that the Act requires is that any change in the conditions sought by either party should be referred to conciliation in the first instance. *A priori*, there is to be no prepossession in favour of the *status quo*; a change is not necessarily to be regarded as unwelcome but peaceful methods of securing that change are to be explored prior to letting loose the barbaric instincts of warfare. Nevertheless, ameliorative legislation undertaken by the Government would be the appropriate method of silencing all misgivings on this point. That alone would raise the level of the *status quo* and thereby render industrial peace an intrinsically covetable ideal.

The success of the Bombay Industrial Disputes Act, 1938, is not to be judged by the reduction in number of strikes and lock-outs but by the ease and good will with

which improvements in the conditions of work of the employees are brought about. Its object should not be to suppress strikes and lock-outs but to render them unnecessary, by substituting a better method of achieving the same ends.

The Place of J. B. Clark and E. R. A. Seligman in American Economic Science

The economic science in the United States lost with John Bates Clark and Edwin R. A. Seligman two most outstanding representatives of the "old generation," that traced the way of American economics during its growing age. Clark and Seligman have so much in common that that justifies this attempt to outline their place in American economic science. They both acted in the same time, belonged to the same group which founded the American Economic Association; they both advanced the ideas of the Austrian subjectivistic school in America. Influenced also by the German historical school, their attempt to give a social interpretation of marginalism and the notion of value, thus opposing the individualistic interpretation, represented in the first place by Frank A. Fetter, placed them, especially Seligman, among the forerunners of the social trend in economics, advanced to-day to a more or less pure form by John M. Clark. Indeed, Seligman is not a very original economic theorist, and was mainly an elaborator of Clark's theses in general theory. But in other respects he continued some ideas of Clark connecting his marginalism with what he learned from German historism, this connection being a fundamental factor in the development of American economic science in the XXth century.

Clark and Seligman, belonging to that group of younger economists who created the Economic Association after the meeting in Saratoga 1885, can be regarded as pioneers of economic science, in the true meaning of that word, in the United States. Even men like Henry C. Carey, Francis A. Walker, Henry George cannot change very much the fact that the American "classic" begins and ends with the generation that acted at the close of the last and the beginning of this century, the generation represented by R. T. Ely, S. N. Patten, H. J. Davenport, T. N. Carver, Frank A. Fetter

and others, and by Clark and Seligman themselves. Clark's *Philosophy of Wealth* and *Distribution of Wealth* earned him a place in the economic science in America similar to that Ricardo, Mill or Marshall have in Europe. Since the publication of these classical volumes American economic theory moved definitely within the limits of marginalism. But even anti-theoretically-minded economists, if we take institutionalism, functionalism, social economics and other trends characteristic of the post-war period, can find in Clark's attempt to give a social interpretation of value and in Seligman's historical, relativistic and social approach to economics antecedents to their doctrines. This aspect of Clark's and Seligman's work may not be so important in itself, as Thorstein Veblen must still be regarded as the classical anti-theorist and relativist; but it is very conclusive to take note of the fact that the doctrines of Clark and Seligman show already perspectives of a split into two different, but not necessarily opposing, currents in American economics.

Neither should we forget that Clark and Seligman were in the most productive periods of their life connected with Columbia University. After teaching at different colleges, Clark came for a definite stay in the Columbia Department of Economics. Seligman, a former Columbia student, was given the McVickar chair in political economy[1] shortly after the completion of his doctorate work and he kept it until a year or two before his death. They both helped the Department of Economics at Columbia to become one of the best schools of economic science we have nowadays. But more than that, they gave support, vitality and courage to a whole generation of younger Columbia men who continued their teachings. Through their writings and personal influence they helped in advancing a trend of thought we would dare to name the Columbia school, its most pure and authoritative representatives being to-day W. C. Mitchell and J. M. Clark. The Columbia department of economics has today its very

[1] The first chair of economics in the United States was given to John McVickar (1787—1868) in the Columbia College and was thereafter named after him.

personal mark, sharply contrasting the pure-theory schools such as London or Harvard, or the schools of a mixed composition.

The credit for driving American economics down the stream of marginalism goes to its greatest part to Clark. It is true that American economists of that time were strongly influenced by the European subjectivistic doctrine, but it was Clark who accomplished the most responsible work of its "acclimatization" in America and its adaptation to new conditions. It is characteristic for Clark, as well as for many other American economists, that they went through European schools in a time of reaction to classical economics. This reaction crystallized definitely in two forms: the subjectivistic or psychological school opposing the *Arbeitswertlehren* of the classics, Marx included, and the historical school, opposing the pure theory of both, the classics and the subjectivists. American economics became thus influenced by both schools of thought, shifting for some time between them and resulting, roughly speaking in a synthesis of marginalism and historism.

Clark himself visited German universities, attended lectures given by the leaders of historism (Karl Knies and Bruno Hildebrand), but became definitely an adherent of the subjectivistic school. He maintained during the years of his most productive work a close intellectual and personal connection with the Austrian school and Boehm-Bawerk. Nevertheless some "tracks" of his historical education can be found in his social interpretation of value as given in the *Philosophy of Wealth*.[2]

It would be misleading to see in Clark a pure transplanter of European subjectivism in America. Although influenced by the Austrians he was an original theorist giving to economic theory some very valuable contributions. Seligman is justified in ranking him among the outstanding representatives of our science such as Ricardo, Mill, Marshall, Jevons, Senior.[3] Even to-day Clark's researches

[2] J. B. Clark, *The Philosophy of Wealth*, Boston, 1887, second edition.

[3] Edwin R. A. Seligman, "Economics in the United States." *Essays in Economics*, New York, 1925, p. 151.

in value, labour and distribution remain basic postulates for advanced work of many American economists.

An original elaboration of the conceptions of the subjectivistic[4] school can not only be found in the details and fragments of Clark's work, but in his system of theory as a whole. While the European subjectivistic school was chiefly concerned with the problem of value, Clark introduced the marginalistic conception in other phases of the process of production and in other parts of the economic activity of man, thus creating a complete system of marginalistic interpretation of economics. Here must, in the first place, be mentioned his original work in the problems of wages and interest,[5] and in distribution.[6] Besides this attempt to create a complete system of marginalism, the introduction of dynamic interpretation should not be overlooked. While his European contemporaries moved in limits set by premises of static conditions, Clark was very much concerned with problems of dynamism and made valuable contributions in his *Essentials of Economic Theory*.[7]

Not discussing some fundamental errors, of the marginal theory of value and exchange, in the first place the impossibility of measuring utility,[8] we would like to point out Clark's advancement of a social concept of value, contrary to Fetter's purely individualistic concept.[9] He writes that ". . . . measurements of utility are never made by any other than a single independent being. Society, as an organic whole, is to be regarded as one great inde-

[4] We rather avoid the word "psychological" which is so often misused and is not able to cover the characteristics of the Austrian school.

[5] J. B. Clark, *The Distribution of Wealth: A Theory of Wages, Interest and Profit*, 1899, New York, Ch. XII, pp. 173—187.

[6] *Ibid.*, pp. 219—230.

[7] J. B. Clark, *Essentials of Economic Theory*, New York, 1909, pp. 195—209, 229—243.

[8] "Value is quantitative measure of utility" (*Philosophy of Wealth*, p. 74). Clark himself was forced to approach an objectivistic notion of value (*cf. Essentials*, pp. 94 *ff*).

[9] Frank A. Fetter, *Economic Principles*, New York, 1915, pp. 19-20.

pendent being, and this being may and does measure utility like a solitary tenant of an island."[10] "It is society, not the individual, that makes the estimate of utility which constitutes a social or market valuation. That is a part of our definition,—measure of service rendered to society as an organic whole."[11] "Exchanges are always made between an individual and society as a whole. In every legitimate bargain the social organism is a party."[12]

Seligman's contributions to general economic theory[13] cannot be compared with those of Clark, but his attempt to "socialize economics" is worth some more detailed discussion. While Clark did not go any farther in that direction, Seligman's most important and most interesting work in general economic problems consisted in a number of studies in historical and social interpretation of economics. There is a study entitled *The Economic Interpretation of History* in which Seligman adopts, in a somewhat moderate form, the Marxian theory of historical materialism. After a very interesting discussion of the backgrounds, antecedents, development, meanings and application of the theory created by Karl Marx and elaborated by Friedrich Engels, Seligman comes to the second part of his book giving a critical analysis of the theory. Opposing the critics that economic interpretation means a fatalistic concept of society,[14] he proceeds with an elaboration of the notion of historical laws (he confuses historical causality and necessity with the notion of

[10] *The Philosophy of Wealth*, p. 81.

[11] *Ibid.*, p. 83.

[12] *Ibid.*, p. 85.

[13] Seligman's theoretical work consists principally of a number of studies in public finance, the most important being: *The Income Tax*, *Progressive Taxation in Theory and Practice*, *The Shifting and Incidence of Taxation.*

[14] "To the extent, then, that the theory of economic interpretation is simply a part of the general doctrine of social environment, the contention that it necessarily leads to an unreasoning fatalism is baseless. Men are the products of history, but history is made by men." *The Economic Interpretation of History*, New York, second edition, 1917, pp. 100-101.

social and economic law),[15] and takes an attitude towards the misused and misleading idea of identifying the theory of economic interpretation, as a means of explaining society and its development, with socialism, as an ideal and a policy.[16] In the final chapter, Seligman gives an original explanation of the limits and validity of the theory: " If we ask, in conclusion, what importance shall be assigned to the theory of economic interpretation, we must consider it from two different points of view. From the purely philosophical standpoint, it may be confessed that the theory, especially in its extreme form, is no longer tenable as the universal explanation of all human life. No monistic interpretation of humanity is possible, or, at all events, none will be possible until that most difficult of all studies—sociology—succeeds in finally elaborating the laws of its existence and thus vindicating its claim to be a real science. As a philosophical doctrine of universal validity the theory of " historical materialism " can no longer successfully be defended. But in the narrower sense of economic interpretation of history—in the sense, namely, that the economic factor has been of the utmost importance in history, and that the historical factor must be reckoned with in economics—the theory has been, and still is, of considerable importance.

The second publication we should like to refer to is a collection of essays on different economic problems.[17] There are two interesting studies of a rather descriptive character on economists and their theories in Great Britain[18] and the United States,[19] and two essays on " Economics and Social Progress," and " Social Aspects of Economic Law."[20]

[15] *Ibid.*, pp. 102—111.

[16] " Socialism is a theory what ought to be; historical materialism is a theory of what has been. The one is teleological, the other is descriptive . . . Socialism and historical materialism are at bottom independent conceptions." (*The Economic Interpretation of History*, pp. 108-109.)

[17] E. R. A. Seligman, *Essays in Economics*, 1925

[18] " On Some Neglected British Economists," pp. 64—121.

[19] " Economics in the United States," pp. 122—160.

[20] *Essays*, pp. 289—303, 304—323.

The essay on economics in the United States is just a brief outline of the matter covered, but we should like to underline Seligman's attempt to bring the development of economic thought with changes in American economic life. This explanation is a part of his general theory of economic interpretation, but set in this way it is unacceptable. Even if economic life is the " raw material " for theoretical and scientific interpretation and explanation, economic science is not simply " an outgrowth of economic conditions " as Seligman writes in the essay on " Economics and Social Progress."[21] The last of the above-mentioned essays, that on " Social Aspects of Economic Law," is important for Seligman's further discussion of social moments in economics, and especially in value, which he considers " a social, and not an individual concept."[22]

The central problem of Seligman's *Principles* is that of value, wherefrom thereafter different economic notions are deduced. His value theory is that of marginal utility and is chiefly taken from Clark. But the social interpretations given by Clark in a just superficial and rough form were carried out by Seligman in their very details. As a pioneer for historical and social approach in America he may not have been so important as Veblen, but nevertheless his influence upon the younger generation should not be overlooked, and his social concept of value is probably the most interesting part of all that he wrote on general economic problems. For him " value in society is the expression of social marginal utility."[23] or " . . . the expression of the social marginal increments of utility which are bound together or united in anything, and each of which is marginal to a different class."[24] This would be a very definite social explanation of marginalism, and it is hard to go any further on the same line, since the marginal theory of value in itself

[21] *Ibid.*, p. 289.

[22] *Cf.* also his " Social Elements in Value," *Quarterly Journal of Economics*, Vol. XV, 1901.

[23] *Principles of Economics*, New York, 1905, p. 182.

[24] *Ibid.*, p. 188.

has no explanatory character, but is just a statement of facts, which isolated cannot give a definite evidence about how value is caused and defined.

University of California. NICHOLAS MIRKOWICH.

Diagrammatical Representation of Marginal, Average and Total Prime and Supplementary Costs

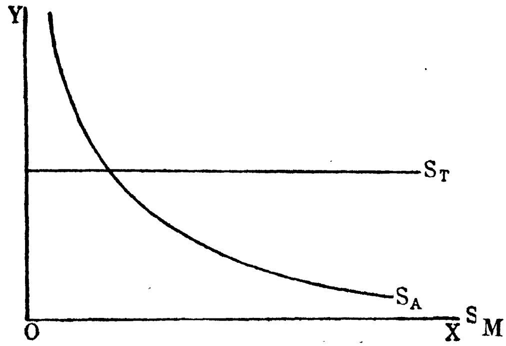
The cost of production of a commodity is made up of two elements, technically known as prime and supplementary costs. The supplementary cost is defined as the total cost of production when the output is zero. This cost is not variable in the manner that the prime cost is. What is, however, supplementary cost from the point of view of one period may become prime cost from the point of view of another period. It is not necessary therefore for the items that are to-day considered as making up the supplementary cost should remain invariable for all times. However, when we refer our analysis to a fixed period, it is possible for us to assume prime costs as varying and supplementary costs as constant. In what follows, therefore, we shall understand by supplementary costs those elements of cost which are fixed, reserving the term prime cost to signify all variable items of cost.

In Diag. I, S represents supplementary total cost, S_A represents supplementary average cost and S supplementary marginal cost. Their equations are:

$y = a$ (S_T),

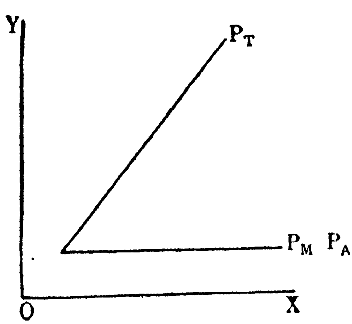
$y = \frac{a}{x}$ (S_A), and

$y = o$ (S_M) respectively.

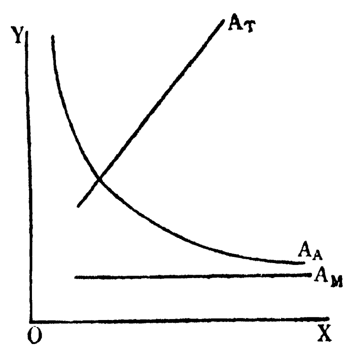


DIAG. I.

The prime costs variable as they are might vary proportionately with the output. One of the assumptions on which such proportional variation rests is that the prices of the factors, the expenditure on which is included in the prime costs, are not variable. The prime cost curves, under such an assumption, would be as indicated in Diag. II. The equations to total prime cost, average prime cost and marginal prime cost are $y=xb$, $y=b$, and $y=b$, respectively, where b is the cost of producing one unit of output.



DIAG. II.



DIAG. III.

If we now combine the supplementary and prime costs we get aggregate costs as represented in Diag. III. The

total aggregate, average aggregate and marginal aggregate curves will have the equations,

$$y=xb+a,$$

$$y=\frac{a}{x}+b, \text{ and}$$

$$y=b \text{ respectively,}$$

where a and b have the same values as before.

The shapes of the curves A_T, A_A and A_M do not turn out to be what they should be. The total aggregate cost curve must, as we know, be of the shape of the letter S. The average aggregate curve must rise after falling, and so also must the marginal aggregate. Since the curves must be of these shapes even in a period of a moderate length, with the supplementary costs fixed, it is obvious that for the necessary changes in the aggregate cost curves the prime cost curves should be changed.

In order that the average aggregate cost may rise after falling average prime cost must be a rising curve (a straight or a curved line). This is a mathematical necessity; but can we give any reason for the increase in the average prime cost as output increases? Since the prices of factors are assumed to be constant the average cost of production should itself be constant. It is possible, therefore, to explain the increase in the cost in the following manner only. As production increases, although the cost does not increase, the output per unit of time decreases. For, the fixed fectors of production are not able to use up the variable factors (that go to account for the prime costs) at the same rate as before. Hence, the prime cost of production per unit of output per unit of time goes on increasing. Hence, if we note that the output represented on the X-axis refers to the output per unit of time, there is no difficulty in understanding how the average prime cost curve could be a rising one.

If it be a straight line of the form of $y=cx+b$ the equation of the average aggregate curve would become $y=cx+b+\frac{a}{x}$. The equation of marginal prime cost curve and consequently of marginal aggregate cost curve would be

$y=2cx+b$. We get, therefore, the aggregate marginal cost to be a straight line with positive slope for all values of x. Since in reality the marginal aggregate cost should also fall before rising we should have an equation of the second degree, satisfying the condition of a minimum. The total prime cost curve should, therefore, be of the third degree, that is, the average prime cost curve should be of the second degree.

Let, therefore, the average prime cost be represented by the expression bx^2+cx+d. The marginal prime and, therefore, the marginal aggregate cost curves will have the equation $y=3bx^2+2cx+d$. We thus get the following curves:—

These curves are shown in Diags. IV and V.

$$P_M=A_M=y=3bx^2+2cx+d.$$

$$P_A=y=bx^2+cx+d$$

$$P_T=y=bx^3+ex^2+dx$$

$$A_A=y=bx^2+cx+d+\frac{a}{x}$$

$$A_T=y=bx^3+cx^2+dx+a$$

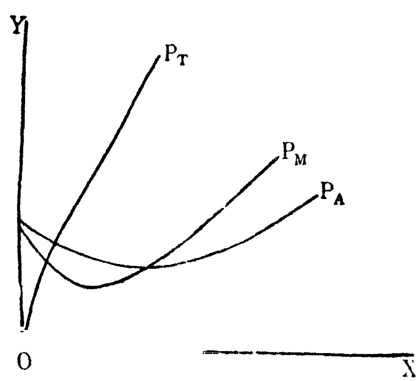
Let us now study the properties of these curves to see if they correctly depict the economic behaviour of industries.

The A_A equation shows that the average aggregate cost is infinitely great when output is zero. This is correct. For, the supplementary cost being finite, it becomes infinite when divided by zero, the output. As x tends to infinity y also tends to infinity, indicating that the average cost goes on increasing with the output.

The A_T equation shows that the cost is a when output is zero, that is, it shows that a is the supplementary cost. It also shows that y increases with x, that is, the aggregate total cost increases with the output. From equation P_A we find that the average prime cost is a finite quantity d, when the output is zero. This might revolt against the common sense of some people. To those who, defining prime cost as that which is zero for zero output, think that average prime cost should be zero when the output is nil, these equations will appear faulty. They are, however, not faulty. The defi-

nition of prime cost requires that the total prime cost should be zero for zero output, and this condition is satisfied by the equation P_T. And we know that when total cost is zero for zero output, the average cost for that output is zero divided by zero, which is, as students of mathematics know, a finite quantity. It may sound absurd to say that when it costs nothing to produce nothing, the average cost of producing nothing is a finite quantity. But this seeming absurdity is due to the fact that we expect to find some real and practical meaning in the concept of average cost which is only a mathematical conception.

Similar reasoning applies to the equation P_M. Putting x equal to zero we get the marginal prime cost to be d for zero output. The conception of marginal cost is not so unrealistic as that of the average. Marginal cost is a reality. How is it then that the marginal cost is a finite quantity when output is zero and consequently the total prime cost is nil? The explanation is that the marginal cost for zero



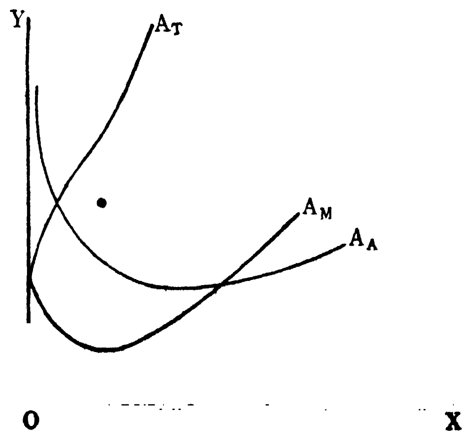
DIAG. IV.

output signifies the cost that would be incurred by producing a small quantity of output. It is the amount by which cost (which is zero for zero output) would increase when the output is lightly increased. In the language of mathematics it is the rate at which the total cost increases with the increase of output, and is calculated by finding the first differential with respect to output of the expression for total cost,

The slope of P_A is $2bx+c$ which would be negative for small values of x (average prime cost falling) if c is negative and greater than b in a cértain proportion.

Further, $2bx+c-\frac{a}{x^2}$ gives the slope of the A_A curve which would also be negative for certain small values of x (falling average aggregate cost) since c is negative and greater than b. Similar reasoning applies to P_M and A_M curves.

Since A_T must increase throughout its slope $3bx^2+2cx+d$ should be positive for all values of x. Since c is negative and d positive, b must be positive.



DIAG. V.

University of Allahabad. J. K. MEHTA.

The Problem of Estimating Population of India During Intercensal Years

In India, as in many other countries, census is taken every ten years. But the population figure for any intermediate year is not available. This is calculated in other countries with the help of figures relating to births, deaths, immigration and emigration. In India, however, this cannot be done as the "vital statistics are well known to be defective[1]" and the migration statistics anything but reliable. The problem of estimating population of India during any intercensal period is, therefore, a difficult one and it deserves a careful scientific study.

In every sphere of the statistical domain a rough estimate of the yearly growth of population is indispensable. It is, however, a matter of genuine regret that an attempt has not so far been made to find out scientifically a satisfactory solution to this rather knotty problem. It is true that the Statistical Department of the Central Government have recently come out with two formulae for calculating intercensal population in India. But, as will be shown later on, neither of these two formulae is scientific and reliable. It is proposed here to discuss the merits and demerits of the hitherto known methods of calculating intercensal population for India.

Evidently, a very correct and trustworthy method would be to add to the population figure of the last Census, the differences of births over deaths and of immigrations over emigrations since the last census. Thus, if the population of India in 1931 be denoted by a, and the total number of births, deaths, immigrations and emigrations during the period 1931-34 be denoted by x, y, m and n respectively, then population for 1934 would be $a+(x-y)+(m-n)$. This formula *minus* the portion relating to migration has been adopted in the Report of the Public Health Commissioner with the Government of India. Where the statistics of birth, death, immigration and emigration are exhaustively and accurately recorded, it is possible from the returns to

[1] *Census of India*, 1931, Vol. I, Part I, page 91.

arrive at a very accurate estimate of the population at any part of the intercensal period. Such a calculation is possible, for instance, in England and Wales where at the Census of 1921 an examination of the age figures returned at ages 0—10, on comparison with the figures deduced from the Registrar-General's returns of births and deaths, convinced the Census authorities that the figures maintained by the Registrar-General were to be preferred to those actually returned for these ages in actual enumeration. That such a method of calculation is not suitable for India is "evident both by knowledge of the methods of record of births and deaths and by comparison in total or detail with population censuses."[2] In the decade 1921-31, about 83·5 million births and 63·5 million deaths were recorded in British India. The increase in the Census of 1931 should, therefore, have been 20 millions. But according to the Census of 1931 the increase was 24·7 millions! So far as Bengal is concerned, in the decade ending in 1921, the vital statistics failed to account for 41 per cent of the actual increase recorded, while in the decade 1921-31 they failed to account for 54 per cent of the actual increase.[3] It seems clear, therefore, that unless the Indian vital and migration statistics are improved to a high degree of efficiency they will be practically of very little value in the estimation of intercensal population in India.

An alternative method would be to calculate population for any future year on the assumption that population changes at a uniform rate between one decade and the next. For instance, the population of 1931 shows an increase of about 10 per cent over that of 1921. Hence, for the year, say, 1936, an increase of about 5 per cent over the 1931 figure may be expected. This method is adopted in the Statistical Department of the League of Nations in estimating birth and death rates for countries where accurate returns of the populations in intercensal years are not available. And perhaps for this reason the Bengal Census

[2] *Report by Dr. Bowley and Mr. Robertson to the Government of India* (1934), page 31.

[3] *Census of India*, 1931, Volume V, Part I, page 10.

Report (1931) acclaims it to be the most satisfactory method in the circumstances. This method has also gained official recognition in India as it has been adopted in the Statistical Department publication "Indian Coal Statistics." A close examination of the method, however, discloses the fact that it actually conceals the effect, on the annual birth or death rate, of the actual variation in their incidence throughout the decade. In the case of India, at any rate, the assumption that population changes at a uniform rate between one census and the next is belied by recorded facts. The following table gives the percentage increase of Indian population from decade to decade:—

Year	Population in millions	Percentage increase since last Census
1872	206·16	...
1881	253·89	+23·2
1891	287·31	+13·2
1901	294·36	+ 2·5
1911	315·15	+ 7·1
1921	318·94	+ 1·2
1931	352·80	+10·6

It is evident from the above how the rate of increase varies from decade to decade. In fact, in the light of the above figures, the adoption of this alternative method for India can, in no way, be justified. It is because of this lack of uniformity in the rate of increase in the population of this country that the methods of interpolation and extrapolation, which are successfully employed in actuarial work, cannot be adopted for the purpose we have in view. In the table given above, omitting the figure for 1872 (there is a general belief that the figure is inaccurate due to imperfect returns) and extrapolating with the help of the remaining figures by Newton's method of divided differences, one gets, for the year 1941, a figure which is *prima facie* absurd!

Dr. Bowley and Mr. Robertson have in their well-known report recommended the use of Life Tables given in the Actuarial Report in the Census for estimating the growth

of population. These tables do not depend on the record of deaths but on the study of the figures of different Censuses. By applying the Life Table to the numbers in the last Census, it can be estimated how many at each age will survive for 1, 2, 3, ... 10 or more years. In this way a fairly good forecast can be made of the population for any year beyond the last Census. But the method depends on too many unreliable assumptions to merit its adoption in India. Firstly, the method assumes that the rate of survival during the last decade is repeated in the next, that is to say, the average death rate *age by age* is the same in the second as in the first one. Judging, however, from the available figures of death rates there seems to be no justification for the assumption. There is another and a far more weighty objection to using this method, at any rate, for India. The method assumes that the statements of age for all people are accurate. But the fact is just otherwise. Dr. Bowley and Mr. Robertson have themselves admitted that the accuracy of the result arrived at by this method is likely to be " reduced by the aberrations that are known to be present in the statements of ages." But they assert that the mathematician is able to smooth away the inaccuracy by the process of " graduation." This statement seems to betray the experts' ignorance about the extent of inaccuracy in the statements of age recorded in India. In a country, where a bare 8 per cent of the total population can only sign their names and where registration of birth is not enjoined by religious customs, accuracy in statements of age can hardly be expected. And on top of this there is lack of co-operation in this respect from all quarters. The illiterate peasants often refuse to state their age before the Census enumerator. The condition among the semi-educated and the lower-middle class is hardly more satisfactory. Even among the educated middle class, particularly in the case of unmarried marriageable girls, age is often deliberately incorrectly stated. When Dr. Bowley and Mr. Robertson spoke of graduating away the inaccuracy evidently they had, before their mind, the picture of an advanced country like the United Kingdom. Unless the present literacy campaign succeeds in wiping out illiteracy

amongst the masses and unless people become less "non-co-operating"[1] and more "statistically minded," the method has little, if any, prospect of being used, with success, for estimating population during intercensal years.

An estimate of the growth of population can also be made with the help of what is known as the "logistic curve." The equation for the curve is usually stated as $y-d=\frac{k}{1+ce^{rt}}$ where y denotes population at a specified time, t time, d starting population, $d+k$ maximum population and c and r are constants. The following are the features of the curve:—

1. Asymptote to a line $y=d+k$ when $x(t)=+\infty$
2. Asymptote to a line $y=d$ when $x(t)=-\infty$
3. A point of inflection at some time $x(t)=\alpha$ and $y=d+k/2$.
4. Concave upwards to the left of $(\alpha,\ d+k/2)$ and concave downwards to the right of $(\alpha,\ d+k/2)$.
5. No horizontal slope except at $x(t)=\pm\infty$.
6. Values of y varying continuously from d to $d+k$ as $x(t)$ varies from $-\infty$ to $+\infty$.

The equation was worked out at various stages by Verhulst, Pasquier, Pearl and Reed but it was Lotka who first gave it a rational derivation in his book *Elements of Physical Biology*. His theory is that population grows in size according to the same methematical law as individual animals and plants follow in the growth of their bodies in size and that human population grows according to the same law as does experimental population of lower organisms. Growth occurs in cycles. Population first waxes in its speed of growth and then wanes. The rate of development depends

[4] The 1931 Census was boycotted by a section of the people in India.

upon the absolute level the population has already attained, and on the amount still unused and unexpended in the given area of actual and potential resources for the support of the growth.

In experiments with fruit-fly Raymond Pearl found that the rate of reproduction per mated female per day declines as density of population increases, at first extremely rapidly and then, more and more slowly at higher densities. The death rate remains unaffected by increasing density as long as the density remains relatively low. But after a certain limit is reached, the death rate begins to increase rapidly with increasing density up to an asymptotal limit. The complete logistic curve would characterise the development of a population passing through an initial stage of slow growth, then a phase of rapid increase in the rate of growth, succeeded by a declining rate tending towards a stable limit.

The simplest way of fitting the logistic curve depends on the fact that the equation $y-d = \frac{k}{1+ce^{rt}}$ may be changed into the form $log \frac{k-(y-d)}{y-d} = log_e\, c+^{rt}$. In other words, $log_e \frac{k-(y-d)}{y-d}$ is a straight line function of time. In fitting a set of observations, therefore, we begin by making as good a guess as we can as to the values of the upper and lower asymptotes. The lower asymptote gives the value of d while the value of k is obtained by subtracting d from the upper asymptote. We then calculate $Z = \frac{k-(y-d)}{y-d}$ for each observation and plot each value as ordinate on arithmetical logarithmic paper against the corresponding time as abscissa. If we have made a good guess as to the values of the upper and lower asymptotes and if the observations are approximately symmetrical, the plotted points should fall nearly on a straight line. If they do not, we try new values of d or k or both until the resulting values of z plotted on arithlog paper are approximately fitted by a straight line which we determine by the eye.

From the standpoint of India the adoption of this curve as a method for predicting future population may be

considered by some to be open to several objections. Firstly, the available data for this country are so very meagre (there are only seven Census figures available) that the goodness of the fit of any equation that may be formed cannot be adequately tested. Secondly, "predictions of future growth may, at any time, be altered by the entrance into the situation of new economic or social factors of a different sort to those which have operated during the past period which the equation covers."[5] Thirdly, it has been stated that growth occurs in a cycle but there are no means at present for discovering the actual stage when a change in the cycle occurs. Thus, in the case of Germany and Japan, Pearl found that the cycle of growth had recently speeded up and showed symptoms of its being at an earlier stage of the growth.

The last two objections can be answered by recorded facts. Equations were worked out by Pearl and fitted to the populations of fifteen countries of the world, the whole world and the populations of certain cities, and they have been shown to give over the whole recorded history of each a very reasonable congruity with recorded facts. For instance, for the United States of America in 1930, a curve worked out before 1920 suggested a population correct within ·05 per cent of the recorded figure. As against the first objection it may be stated that seven points are sufficient for the determination of a straight line. In fact, the success of Pearl's estimates, as described above, urges one to suggest the adoption of a similar method for India as a whole. In the Bengal Census Report of 1931, a laudable attempt has been made by Mr. P. J. Griffiths, I.C.S., to find out a logistic equation for the Bengal population. Two other equations have been prepared for the same province and the most accurate of the three, according to the Report, has been stated as follows:—

$$p = \frac{79{,}963}{1 \cdot 16244 + e^{-\cdot 01775x}}$$

where p is the population for a given period and x the number of years after (+) or before (−) 1st March, 1881.

[5] *Biology of Population Growth*, by Raymond Pearl.

The equation gives us a population of 53 millions for 1941 and 55·1 for 1951. Once the equation has been worked out and the curve drawn it is very easy to deduce the population figure during any year—past or future. The Census of 1941 will show how far the estimate for Bengal is correct. At the same time an attempt should be made in the Census of 1941 to find out a logistic curve for the whole of India. This may easily be done by the Census Commissioner with the help of experienced Statisticians. Or, the work may be done in collaboration with the Statistical Laboratory of the Indian Statistical Institute, Calcutta. Anyhow, as there seems to be no other reliable means to estimate the growth of population in India, and in view of the fact that Pearl has had a remarkable success with the curve in his calculations for many of the important countries of the world, the method is at least worth a fair trial in India. Once an equation has been established it could be verified or amended in the light of subsequent Censuses. If we are successful with the method it would go a long way towards solving a great and a rather perplexing problem in the sphere of Indian Statistics.

D. N. SEN GUPTA.

REVIEWS OF BOOKS

THE GROWTH OF FEDERAL FINANCE, by Professor P. J. Thomas. Pp. 558. Oxford University Press. Rs. 12-8-0.

In this book, Professor P. J. Thomas covers a very wide field. He not only gives an account of the successive steps by which Indian finances have been decentralised and of the present allocation of resources between the Central and Provincial Governments but also reviews the history of land revenue, the growth of public expenditure and the development of local finance.

He speaks of the early proposals for financial devolution as the beginnings of federal finance. The description of the proposals, which were made merely to ease the strain on the administrative relations of the different branches of the same government, indicates that the author uses the word ' federal ' in a somewhat unusual sense and conveys an impression that federation in an incipient form was foreshadowed in the financial readjustments of 1870-71, which is not a fact. That federation must be the natural outcome of the political evolution of India goes without saying; but before 1931 the federal ideal was not present even in the minds of the authors of financial decentralisation, and now that the war has thrown the whole federal scheme into the melting-pot, it is impossible to tell when a real federation and its financial counterpart will come into being. The various financial readjustments made before 1921 were not federal in their intent and effect; and though with the introduction of responsibility under Dyarchy, the beginnings of federal finance can be posited, the position is so very elusive that we cannot possibly regard it as the " growth of federal finance in India."

Apart, however, from this mistaken characterisation of the whole process of financial development in India, the book gives a clear and connected account of financial devolution since its early beginnings; and though the information contained in it is not new and does not reveal any unfamiliar aspects of Indian finance, the details are of great interest and have been derived from sources to which the average student of Indian finance cannot have ready access. Professor Thomas has given references which the reader will find very useful and in several cases get clarification of points which have so far been obscure.

In a book of this size one naturally expects critical examination of the present position and assessment of the various measures by which it has been reached. Professor Thomas does pass judgments on points of interest which are sound as far as they go;

but they stop short just where further evaluation and constructive insight seem to be called for. It may be that this is intentional and the author intends the book to be more descriptive and historical than critical and constructive. If that is so, the limitations referred to above may be taken to be inherent in the plan of the book and cannot be reckoned as its shortcomings.

The reader will find in the book considerable material for forming his own judgment and will, as I have said, find himself brought to points which will suggest further lines of enquiry for the pursuit of which he will find useful references in the book. Professor Thomas himself will probably subject the material to a critical analysis in a later work and make it a constructive approach to the problems of federal finance—an approach which the course of events in the immediate future may probably make urgent and highly fruitful. In this book he has given the historical background for which he is entitled to an appreciative recognition from the students of finance in this country.

GYAN CHAND.

THE STATE AND ECONOMIC LIFE, by Anwar Iqbal Qureshi, Ph.D., of the Economics Department of the Osmania University, Hyderabad (Dn.).

In 208 pages the author surveys the working of the new policy of state regulation of economic activities which is now predominant in most countries, and comes to the conclusion that it is on the whole futile and wasteful. He feels that there is no ready-made solution for economic ills and approves of a policy of rationalisation. He is critical of bureaucratic handling of economic affairs and frankly declares his faith in economic freedom as an instrument of world prosperity. His criticisms against some of the forms that state intervention assumes are indeed valid; but, frankly, it is now too late in the day to argue the case for "let alone." It is not a question of faith in particular systems but of given institutions yielding the good that is expected of them. A certain sense of realism and historical perspective is indispensable in appraising the real significance of the changing currents of economic thought and action.

Thus there is nothing illogical or absurd in mercantilist policies attaining respectability in the contemporary world. As in the heyday of Mercantilism so at present the world is divided into warring or warlike nationalities. Indeed, the present-day economics are the economics of a war period in which the sense of nationalism is all powerful. These tendencies may be good or bad. History alone will show, but for the economist and the work-a-day administrator the ends of national policy must be most economically gained. There cannot be a universally and a

perennially good economic policy. Changed needs make changed policies.

The internal defects of a policy of unrestricted individualism have been once again laid bare by the last depression. An attempt completely to replace private by state economy may merit the criticism of the author. But the gradual introduction of the principle of planning and regulation in our predominantly capitalistic structure is not only justifiable but urgently necessary. The rationalisation which Dr. Qureshi approves cannot be introduced on the desired scale unless the state plays a much more positive part than it did in the past. Our economics ought to grow out of our needs. Undoubtedly state regulation and careful social planning are two of the most urgent needs of the time. We may not look upon these as a panacea and we ought to try and minimise the likely evils that they will tend to produce. But the new tendencies are quite genuine, and hence, quite correct methods of meeting the situation.

That there is a regrettable tendency in India to expect the state to do everything must be accepted. Equally well the hollowness of the argument, in fact the dangers that might come in the wake, of the full-blooded and unconditional protectionists must be exposed. But if rationalisation of our economic life is to be achieved and if our resources are to be most economically and speedily developed both protection and planning must be resorted to. There are difficulties in the way of an immediate framing or adoption of a plan. Neither data, nor machinery and political power are available. But our objective must certainly be planned and regulated industrialisation.

In respect of key industries the author approves of the grant of subsidies. As taxation in India is well known to be regressive, it is difficult to accept the view that subsidies will be less regressive in their incidence than tariffs. It is true that the sacrifice will be brought home to the community and control may be faciliated. But then for reasonable protection, as much as for any more ambitious policy, state control is indicated. The fact of the matter is that we cannot now escape from the natural demand of the present state of capitalism, which is social control.

This indeed need not, in fact, ought not to mean the end of legitimate individualism. With a socially inclined individualism we can secure the energy of private initiative and the justice of social union. Through co-operation as much as through other mixed forms of economic activity that are being daily created, the best of both the systems may be secured in so far as the pressure of events permits. In doing so the criticisms of the author will be helpful.

D. G. KARVE.

TRENDS OF AGRICULTURE AND POPULATION IN THE GANGES VALLEY, by Prof. Birendranath Ganguli. Methuen and Co., Ltd. Pp. 315.

This book of Professor Ganguli deals with the inter-relation of agriculture and the growth of population in the Ganges Valley. The numerous factors that determine the changes in agriculture as well as population have been carefully studied in all their complexities, and very useful inferences are drawn from the study in the region chosen. This book is a distinct contribution to the literature on the population problem of India, since it envisages a scientific approach to a baffling problem.

The author has traced the growth and distribution of the populations in the different chosen tracts of the Valley and has shown, very clearly, the problem of the " adequacy of cultivation " with reference to local conditions. The sufficiency or otherwise of cultivation in a particular tract depends upon the factors governing agriculture, the stage of agricultural technique developed there, the nature and distribution of population in that region, etc. These operating factors are clearly analysed in many parts of the book. Professor Ganguli points out how, if the limiting factors of progress set by nature are interfered with, the results are far from being beneficial. Our attention is drawn to the fact that " in certain tracts the increasing pressure of population upon the soil has led to denudation of forest, soil erosion and agricultural decadence. In other tracts, owing to artificial derangement of drainage levels there is widespread water-logging of land, and the conditions of health and subsistence have become so unfavourable that there is rural depopulation on a large scale. . . ."

The problem of rural density has been dealt with in a masterly fashion. The author demonstrates how " Rural density in the crowded monsoon zone supplies an invaluable index of economic exploitation on the one hand and the ensemble of natural agricultural advantages on the other." The wealth of details given regarding the soil, rainfall, irrigation, the influence of the Ganges, different crops, modes of cultivation, etc., in the several districts chosen for survey, clearly bring out the correlation between the forces, geographical, economic, ecological or any other. " The variability, limits and optional conditions " of agriculture in the area are also clearly brought out.

Professor Ganguli presents his survey of the trends of agriculture and population in the Ganges Valley in three different chapters. The first deals with the Upper Ganges Valley, the next with the middle region, and the last with the Ganges Delta. In his survey of each of these regions—chosen for their differences in rainfall—he has dealt with the population problem with regard

to four vital factors, *viz.*, (1) extension of cultivation, (2) double-cropping, (3) agricultural water supply, and (4) choice and combination of crops.

For a study of the density of population in a given area, the author favours an investigation of "the process and stages of agricultural development as determined by the extension of cultivation." He infers from his survey that "the extent to which cultivation has expanded or contracted, or has a clear tendency to expand or contract, is a clear indication of the agricultural possibilities of a particular tract and of its population capacity." Much information is given regarding double cropping in the Valley and it is also shown that there exists a "statistical correspondence between the high density of population and the extent of the double-cropped area in this region." The influence of agricultural water supply has been elaborately dealt with. Prof. Ganguli shows how "population has a tendency to decrease in those agricultural tracts which normally receive a scanty rainfall and are liable to drought, and in which at the same time farmers cannot often increase resistance to it by means of protecting irrigation works. In such ill-fated regions famine causes mortality either directly by starvation or indirectly by beating down resistance to disease, and perhaps lowers fertility." The importance of the choice of crops in relation to the trends of population has also been emphasised by the author.

This book is an exceedingly well-written and scientifically planned study of the population problem in the Ganges Valley. Without any hesitation we recommend it not only to the students of Rural Economics but also to those who may be looking forward for helpful suggestions in formulating correct agricultural policies for different regions in India. Professor Ganguli's book will undoubtedly serve as an excellent model for similar useful surveys to be undertaken in several parts of this country.

B. V. NARAYANASWAMY.

THE STATE IN RELATION TO LABOUR IN INDIA, by V. Shiva Ram, M.A., Ph.D., Professor and Head of the Department of Political Science, Lucknow University. (Delhi University Publication No. 8). 1939. Pp. 175.

This publication is the outcome of the Sir Kikabhai Premchand Readership Lectures that the author was requested to deliver at the invitation of the University of Delhi. Dr. Ram is a scholar who has established his reputation as a sound and careful research worker in the field of Political Science. He has had the unique advantage of being an actual Member of the League of Nations Secretariat at Geneva for some time.

In launching upon the subject of labour, he has endeavoured to try fresh fields for his restless energies. The learned doctor is to be congratulated for his effort. The layman will find in these Lectures a comprehensive bird's-eye view of the salient labour questions dealt more or less from the historical perspective. For the specialist, there would be little in these Lectures to repay study, except this that he would be able to re-read, in very brief summary, matters that he already knows. Such review has its advantages.

S. K. R.

RAIL-ROAD TRANSPORTATION, by Prativa Chandra Banerjie, B.A., F.R.E.S.

This book contains a number of subjects of topical interest in current problems of Indian Railways. The author at first gives a historical survey of the development of railways in this country in which he discusses various questions, such as the financial position of the railways, the relations between the State and the Companies, the separation convention, etc., and in discussing these he makes no secret of the fact that he prefers Company management to management by the State, which is, however, a very controversial matter, and critics will not be found wanting to dispute his assertion. But few will really challenge some of his later statements such as that real economy can result from amalgamation of railways on scientific principles and that diversity of gauges acts as a stumbling-block on the fluidity of rolling stock impeding the development of long traffic. His treatment of rate and tariff questions is interesting and will be found useful by students of railway economics. Finally, the chapter on Rail *vs.* Road Transport attempts to discuss the respective merits and demerits of these two forms of transport and in discussing these the author probably rightly criticises the attitude of the Government of India towards the development of road transport in this country.

M. K. G.

WORLD PRODUCTION AND PRICES, 1938-39. Published by the League of Nations, Geneva.

The volume under review shows that world production in 1938 fell slightly below the record levels attained during 1937. Total primary production decreased by some 2 per cent; this fall, however, is almost completely accounted for by the fall in the output of industrial raw materials, which amounted to 10 per cent, while the output of crude foodstuffs actually increased. Production of manufactured raw materials—steel, pulp, and other processed raw materials—fell by 9 per cent, and that of

manufactured products by 7 per cent. The quantum of world trade fell more than world production as a whole, *i.e.*, by 8 per cent.

The "depression" in 1938 may be traced back to the industrial recession which began in the United States during the second half of 1837 and gradually spread to a number of other countries. The decline came to an end towards the middle of 1938, and production in all the important countries was definitely on the up-grade, when the war broke out in September 1939 and threw out the whole economic machinery out of gear. The turn in the business cycle in the United States in the middle of 1938 was the first proof of the success of Government policy of public works, easy money, etc.

A brief introductory chapter shows that during the last year far-reaching structural changes have occurred which make a purely economic analysis of world economic developments difficult. The more or less uniform world economic system which had been restored during the nineteen-twenties has again broken down. The disappearance of a common monetary standard, the growth of nationalistic commercial policies, and the striving for autarky, as well as the active business-cycle policy pursued in a number of countries, have made for the creation of a number of more or less economically independent groups of countries within which there is space of widely divergent trends of movement. This tendency has recently been accentuated by the concentration of national effort on armament. Past experience is no longer a safe guide to developments. Production in 1938 reflects general insecurity, trends differ greatly from country to country, and the general world averages give but an imperfect expression to these varying tendencies. Broadly speaking, however, production figures reflect an increasingly unsettled political situation which has resulted now in the outbreak of an inevitable European War. Who knows it may engulf the world? During the War the production as well as the prices of most of the countries will be controlled and their interpretation will be on a different line.

We commend the volume to thoughtful students of the subject.

K. L. G.

INTERNATIONAL TRADE STATISTICS, 1938.

The present volume contains statistics of sixty-seven countries for the years 1936—38. It is bilingual (French and English), and the countries are given in the French alphabetical order. Among other things it gives detailed trade tables of each country. The volume is full of useful tables and is a book of reference for serious students of the subject.

K. L. G.

INTERNATIONAL TRADE IN CERTAIN RAW MATERIALS AND FOODSTUFFS, 1938.

This volume is the fourth of its kind published by the Economic Intelligence Service of the League of Nations in 1939. It gives an account of the movement from one country to another of various commodities.

The volume contains provisional statistics for 1938 as well as revised and completed statistics for 1936 and 1937 of 38 principal commodities of world trade. These commodities include wheat, sugar, rubber, wood in various forms, hides, wool, cotton, silk, iron and steel, copper and motor spirit. The number of importing countries covered by the various tables is 125. The statistics are practically world-wide, the 125 countries dealt with representing 98% of the total world trade.

The object of this volume is to show the sources from which raw materials and foodstuffs really originate and also the countries where they are actually consumed. The trade returns published by many countries fail to furnish this information or they indicate some intermediate country from which the goods have been sold or consigned and not the country from which they originated.

The present volume is a highly useful book of reference and should be on the shelves of every library worth the name.

K. L. G.

PRICES AND WAGES IN ENGLAND FROM THE TWELFTH TO THE NINETEENTH CENTURY. Volume I (Price Tables: Mercantile Era), by Sir William Beveridge with the collaboration of L. Liepmann, F. J. Nicholas, M. E. Rayner, M. Wretts-Smith and others, Pp. ix+756. Longmans. 1939. Price 31s. 6d.

"The purpose of this and the succeeding volumes is to present a history of prices and wages in England, as a part of a co-ordinated scheme of parallel studies in other countries." In 1929 Professor E. F. Gay and Sir William Beveridge prepared a memorandum urging the need of a co-ordinated study of prices of various countries of the world on a comparative basis. Their memorandum led to the making of a grant by the Rockefeller Foundation to finance such studies in Austria, England, France, Germany, Holland and the United States of America. The present work is a fruit of that grant.

The present work as planned consists of four volumes: I Price Tables: Manorial Era (1550—1830); II Price Tables: Manorial Era (1150—1550); III Wages, Wheat Prices and Supplementary Material; and IV Review and Appendices. The present book is the first volume of the series.

The first volume very reasonably refers to the Mercantile Era (1550—1830) and not to the Manorial Era, for in Europe ample and continuous material is available only for the former and not for the latter. It gives only the Primary Tables and Secondary Tables:

The sources from which the Primary Material has been derived are the following: Winchester College (1393—1817), Eton College (1444—1831), Westminster School and Abbey (1564—1830), Charter-house (1644—1830), Sandwich, (St. Bartholomew's Hospital) (1543—1766), Greenwich Hospital (1695—1828), Chelsea Hospital (1702—1810), Lord Steward's Department (1659—1830), Lord Chamberlain's Department (1556—1829), Office of Works (1552—1814), Navy Victualling (1683—1826) and Naval Stores (1566—1813). The Primary Material is preceded by General Introduction and Reader's Guide and followed by Secondary Material.

The Primary Tables give, "for each commodity, a yearly average price in terms of contemporary money, made comparable from year to year by expressing each series throughout its length in the same units of currency and quantity and by clearing the series, so far as possible from errors and from changes of any internal factors." These Tables have been very carefully and painfully prepared through successive steps of Extraction, Serialization, Annual Tabulation and Statistical Criticism and Tabulation. These Primary Tables are supplemented by Secondary Tables of various kinds.

This is the most remarkable and authoritative work on English prices and wages ever published in England. It is the most remarkable book of Economics published in recent years in England. The pioneer and unparalleled work of this type is that of James E. Thorold Rogers, "A History of Agriculture and Prices in England. in 7 volumes, published between 1866 and 1902. For a generation they have been used by economic historians as the basis of comparisons of prices and wages. But this work, while it has no rival, is both incomplete and imperfect. Its temporal range is small, its raw material is poor and is marred by frequent errors of judgment and statistical mistakes. The present work is an improvement over Rogers' work in more than one way. Its temporal range is 1155—1830, *i.e.*, 675 years whereas the temporal range of Rogers' work is from 1259 to 1702, *i.e.*, 444 years. The present work "aims at to push back Thorold Rogers' price series to an earlier date and to check and supplement it for latter periods." The new material is surprisingly better, alike in quantity and in quality, than that available to Rogers.

Enormous material of this nature is available in the old *Bahikhatas* of firms of very long standing in India as well. Un-

used and uncared-for, they are fast going to waste. If this material is carefully utilized by Indian economists, it can throw much light on our economic condition during the past. The question of finance, however, is the most baffling problem, and we like to draw the attention of the Rockefeller Foundation to make a similar grant to Economics Department of Allahabad University for carrying on work on similar lines in India.

It is hoped, however, that the great pains that Sir Beveridge and his associates have taken in preparation of this monumental work. will be amply rewarded and it will now come to occupy the position the Rogers' work has so far done.

DAYA SHANKAR DUBEY.

THE RECENT DEVELOPMENT OF ECONOMIC FOREIGN POLICY IN THE NETHERLANDS EAST INDIES, by J. Van Gelderen, Professor of Sociology in the University of Utrecht and Member of the Netherlands Parliament. Publication No. 20 of the Graduate Institute of International Studies, Geneva. Longmans, Green & Co. London. Pp. 90, 5s. net.

In a world in which power politics is dominated by claims and counter-claims to colonies it is conveniently forgotten that the world consists not only of 'Haves' and 'Have-nots' but also of people who do not want any longer to be 'had' by any person or nation. Economic imperialism in the sphere of colonial development has passed through several stages. The system of direct and compulsory state-exploitation, which constituted the initial stage of colonial economic policy, proved inefficient for the mother country and oppressive for the children of the soil and was eventually replaced by a second stage of free trade and 'open door' founded upon the ideal of economic liberalism. In recent times colonial development has been passing through a third interesting phase. Owing to a combination of favourable circumstances the policy of free trade and 'open door' was hitherto conducive to an intensive exploitation of colonial resources. But recently, it has proved to be incompatible "with modern business and with the growing influence of totalitarian methods in trade." Moreover, with free trade and 'open door' the political structure of the colony has sometimes been threatened with destruction through the economic penetration of a strong political power trying to consolidate its position by legitimate as well as by questionable methods, and in this struggle between the so-called 'Haves' and 'Have-nots' stable economic development becomes impossible for the native inhabitants of the colony. Hence, partly owing to political pressure exerted by the indigenous population of the colonies and dependencies, and partly as the outcome of the

enlightened self-interest of the mother country, a new policy is being evolved by the great colonial powers. This is the policy of closing the 'door' to a certain extent and, if necessary, completely, so as to avoid economic and. political penetration of foreign powers—a policy which has required state regulation of exports, imports, production, immigration, shipping and investment. But such a 'defence mechanism' as has been rendered necessary by the break-up of world economy, the growth of 'autarky' and the struggle for economic penetration, ultimately generates the forces of *Decolonisation* in the economic sphere, and there is no doubt that the tendency to make colonies dependent on western enterprise and western export trade is being gradually and unmistakably reversed in the colonial empires of to-day.

Professor J. Van Gelderen has given us a remarkable study of a colony in transition from the second to the third and more recent phase of economic development, and the story has great significance for us.

The economic troubles of Netherlands East Indies (N. E. I.) started with the world crisis of 1930 and the subsequent dislocation of trade. In common with India and many other agricultural countries, the N. E. I. were faced with a serious worsening of the terms of trade, a heavy shrinkage of the favourable balance of trade which threatened national solvency, and serious budgetary disequilibrium. Unfortunately, the N. E. I, adhered to the gold standard till September, 1936. The policy of deflation led to widespread impoverishment and to export of distress gold to the extent of 144 million florins during 1931—35. Although deflation was designed to restore competitive power in the export markets by lowering costs, yet all too heavy overhead costs due to investment of capital on a gold basis hampered the restoration of competitive power. Hence, it was felt that the interests of the colony were being sacrificed for the sake of the mother country who was only anxious to safeguard her own interests as a creditor. The collapse of purchasing power resulting in a serious reduction of imports reacted adversely on exports specially because trade amongst the N. E. I.'s customers was already flowing into bilateral channels.

It appears from Professor Gilderen's Survey that state regulation of imports was a weapon in the hands of the N. E. I. Government for fighting the menace of cheap Japanese imports which tended to upset the N. E. I.'s balance of international payments. "Europe and America which bought 52% of the N. E. I.'s exports in 1930 took no less than 61% in 1935." At the same time their share in the imports into N. E. I. decreased from 65·6% to 43·9%. On the other hand, the N. E. I.'s favourable balance of trade with Japan was converted into an un-

favourable balance which amounted to 74 million guilders during the years 1933-1934. As regards the Dutch share in the N. E. I.'s imports it declined from 32·5% in 1909—13 to 17·6% in 1925—29 directly as the result of Japanese competition. The countries having an unfavourable balance of trade with the N. E. I., began to turn to other sources of supply, and her position became vulnerable in the case of commodities like sugar, coffee, tobacco, hides and skins, copra and fodder cakes. The only way out of the crisis which appealed to the N. E. I. Government was the quota system which included *General* as well as *Specified* quotas. *General* quotas restricted imports of the bulkiest and cheapest commodities to the probable needs of the market and prevented a substitution of chapter goods for expensive varieties, while *Specified* quotas were imposed according to certain countries of origin on the basis of reciprocity. Professor Gelderen claims that by a partial exclusion of cheap Japanese imports the cost of living "did not increase *very much*." Many firms who held licences for both European and Japanese goods utilised the profits on the latter to balance the loss on the former. For certain textiles buffer stocks were kept under Government control to "smooth price fluctuations." As far as foodstuffs were concerned, with the contraction of the sugar industry, sugarcane cultivation was replaced by rice cultivation, since imports were checked, speculation resisted and the colony rendered independent of foreign imports of rice. In the same way there has been a complete substitution of home-grown soya bean for Manchurian imports.

The quota system was undoubtedly a measure of imperial preference and somewhat strengthened the economic ties between the N. E. I. and the mother country which was anxious to give something in return. The Netherlands granted a quota for fodder cakes, agreed to buy 60% of the total exports of vegetable fats, guaranteed the imports of certain quantities of maize and rice from the N. E. I. to prevent prices from falling below a certain level, decided to consume Dutch colonial sugar only and offered the N. E. I. Government a loan of 25 million guilders for public works the interest and redemption of which were to be paid by the other country. Moreover, in clearing agreements and bilateral trade agreements with other countries the Netherlands included the export interests of the N. E. I. and secured for them valuable concessions. But the promotion of inter-imperial trade was limited in scope and was hampered by the economic crisis.

The regulation of imports was necessarily accompanied by control of production and exports. The chief aim was either restriction of output or elimination of excessive stocks or restoration of an economic level of prices. The means adopted varied from limitation of exports or mere segregation of stocks to direct regulation of production or even organisation of a selling

monopoly. Professor Gelderen gives a very interesting account of these measures in the case of the staple exports of the N. E. I. such as cinchona, capok, tea, tin, rubber and sugar. Greater success seems to have been achieved in the case of tea, sugar and rubber the production of which is planned and regulated by international organisations.

With the abandonment of free trade and 'open door' discriminatory treatment of foreign labour, foreign capital and foreign shipping has followed as a logical consequence. The influx of immigrants is now being limited to an annual quota which till now has been fixed each year at 12,000. "For all except the Dutch and the Chinese a maximum of 800 has been set up." The importation of foreign European experts is sought to be stopped by the requirement that employers have to obtain special permits which may be refused unless it is proved that "no person available for the same job is found among the inhabitants." As regards foreign capital also colonial interests are safeguarded by restrictions. All joint-stock companies must be domiciled in the N. E. I. In some places the Boards of Directors must have a majority of Netherlands subjects or persons domiciled in the N. E. I. In the contracts for mining concessions there are sometimes special clauses providing for the Government's share in the profits of exploration and exploitation and a special stipulation "that a certain proportion of the administrative staff and of the labourers shall consist of Netherlands subjects." The N. E. I. with many scattered islands formerly required and welcomed the co-operation of many foreign shipping companies for maintaining the lines of communication. But the menace of Japanese competition has compelled the colony to revise her policy. Now seaports open for general trade are open to ships of all nations, *subject to reciprocity*. But "coastal places" are reserved to the Dutch flag; the Government may grant or withhold licences to foreign lines for participating in the coastal trade.

Professor Gilderen's work is an invaluable handbook on the commercial policy of the N. E. I. and will be read with interest and profit by those who are speculating on India's commercial policy in the near future.

B. N. GANGULI.

POPULATION AND PEACE: A SURVEY OF INTERNATIONAL OPINION ON CLAIMS FOR RELIEF FROM POPULATION PRESSURE. F. C. Wright, B.Sc. (Econ.), Ph.D. (London), I.I.I.C.. Paris 1939. 7s. 6d.

'This volume is issued by the International Institute of Intellectual Co-operation as one of a series of studies on peaceful change carried out by the International Studies Conference, in the

course of an enquiry into the basis difficulties in, and the procedures for, the peaceful solution of economic, social and territorial problems, with special reference to questions of (i) population, migration and colonisation and (ii) markets and the distribution of raw materials.' In the course of its studies the Conference assembled a great mass of material which it was physically impossible to reproduce in full. The Board therefore decided to publish it in the form of convenient summaries and entrusted their preparation to expert authors. The present volume is one of the series planned in this way.

In 1933, the International Studies Conference opened an enquiry into the notion of collective security and organisation of peace. It led to the study of the causes of war. The most powerful motive is usually the supposed need of a change of the *status quo;* and the Conference wanted to find out whether a peaceful change of the *status quo* is within the bounds of practical politics (Ch. I). The need arises on account of the real and alleged grievances of certain dissatisfied countries and the claims put forward by them for their removal by what they consider to be fresh and fair national and colonial rearrangements. There were in particular three types of claims to *terre irridente*, to outlets for emigration and to industrial markets and sources of supply. In other words, the problems were of population, marketing and raw material. The present volume is concerned with 'the demographic basis of claims assumed to have been made by the "dissatisfied" countries for colonial and territorial expansion.' (Ch. II.)

Ch. III reviews the claims of the "dissatisfied" countries, Italy, Japan, Poland and Germany. The conclusion reached is rather unexpected. "The foregoing review . . . . goes to show that (the adduced evidence) is partly contradictory, partly hypothetical and largely inconclusive. It seems to indicate that the population question . . . (is) not as serious as many nations would like to assert." "In Ch. IV, the problem of overpopulation is considered from various standpoints and the result in this case also is rather startling. 'In 1931, a calculation was made of the excess of births—exact or approximate—per square kilometer for every country of the world and it was found that there were four countries whose demographic co-efficient exceeds one and whose overpopulation was not sufficiently neutralised by the influence of territories dependent upon them. The countries are: China, Japan, Italy and Poland. Next in order, came Germany with a demographic co-efficient of 0·99. These countries are known to be overpopulated. It seems certain, therefore, that demographic pressure does not exist. . . .'

In Ch. V, the basis of population claims is analysed. This chapter is highly informative. All sorts of expansionist aspira-

tions, policies and claims are examined and then it is shown that in the field of population movements there is 'a great confusion of values and of attitudes.' The last four chapters survey the demographic remedies for overpopulation:—(1) Emigration, (2) Colonial expansion, (3) Internal Economic development and (4) International Planning. Views on emigration are so conflicting as to defy reconciliation. There has come about a double shift in the incidence of the migration problem. Formerly, it played a useful international role as a movement of immigration; to-day, it causes international friction as a movement of emigration. The question of colonial expansion is teeming with almost insoluble legal and political issues. There are only three alternatives: to leave the underdeveloped countries alone; to put their inhabitants to school but to leave them their possessions; or to take their lands and employ them as servants. As to internal economic development, it is shown that 'there is no such thing as a surplus population anywhere in the world, except one that is relative to and caused by the existing commercial and economic system. There is no reason why a country should not develop a population as thickly upon its ground as in a highly industrialised area, and still maintain itself, if it could draw freely upon the resources of the rest of the world? Domestic action of any kind, however, is not likely to resolve the danger with which the population problem threatens us to-day. Hence, a suggestion was made to the I.S.C, that time had come for international demographic planning. An economist of repute recommended certain international agreements for consideration by the International Studies Conference. The book ends, practically, with the memorandum prepared for the I.S.C. in 1937 by Mr. J. Legouis.

A distinguished economist once wrote that the population problem is an efficacious anodyne for crisis-vexed brains. The present work confirms that prescription. The problem is multiangular; here in this book only one aspect, political, is dealt with; and European experts find that, too, too complicated for any satisfactory solution. It is a very valuable and interesting work. The mass of material that is condensed is enormous. Every student of population problem will find it stimulating. Those who are constantly harping on India's overpopulation may be provoked to further serious thinking.

H. B. Bhide.

A Comparative Study on National and Social Finance, by Bimala Kanta Sarkar. 1939. Published by Ghosh and Gupta. 3—1. Russa Road, Calcutta, 1939. Pp. xii+140. Price Re. 1-8.

The book is divided into four chapters and two appendices. In Chapter I the author has studied the nature of local finance;

Chapter II is devoted to local finance in some countries; Chapter III to sorts of grants in aid; while in Chapter IV the problem of control of local authorities is discussed. Appendix I gives us an idea of local taxation in England; while appendix II deals with the principles of favouratism.

Leaving aside the misprints, the peculiar grammatical constructions and complete absence of some aspects of local finance in the book and taking into consideration only that which the author has given us in the book we are of the opinion that the work is neither well-planned nor efficiently executed. It is a collection of undigested material on some aspects of a great topic.

B. G. BHATNAGAR.

ECONOMIC GEOGRAPHY OF INDIA, by Dr. R. N. Dube. Published by Kitab Mahal, 63, Zero Road, Allahabad. 1939. Pp. 190. Price Rs. 3.

Dr. Ram Nath Dube, Head of the Department of Geography in the Allahabad University, has rendered yeoman service to the students of Economic Geography in India by writing the book under review. The book has been written with the definite purpose of supplying a long-felt want of the student community. Its appeal is, therefore, largely to the beginners of the subject, and not to the advanced students. The treatment and the style alike have been kept perfectly simple. We congratulate Dr. Dubey on bringing out this excellent little work on the economic geography of India.

B. G. BHATNAGAR.

THE INDIAN STATES AND THE FEDERATION, by M. K. Varadrajan. Oxford University Press. Price 12s. 6d.

The Government of India Act, 1935, with its provisions relating to Federation of India, has placed the Indian States in a new relationship with the other parts of the country. They have been brought into a new political contact with the progressive Provinces, and are empowered to act in an extensive field of all-India matters. It is a considerable change in the position of the Indian States. From being subject to the whims of a Political Department working out their destinies in the interest of British India they have now secured the right of forging the economic and perhaps the political life of the whole country. Their separation was nominal before, now their 'union' for all-India purposes will be real. As such the new Act marks a considerable advance in the status of the Indian Sates.

Mr. Varadrajan has very lucidly described the various changes envisaged by the new Act and devoted their effect on the position

of the Indian states. In the first chapter he has given a brief sketch of the evolution of federal idea and in that connection he has indulged in a useless academic discussion of sovereignty in respect of the Indian States. Whatever be a jurist's interpretation, history has no hesitation in recording that the Indian Princes exercised merely a reflected sovereignty merely on sufferance of the Paramount Power. Whatever their original status, they have now come to be "an integral part of the imperial polity." He is right in stating that by the "process of unification" the "ground plan of a federation had gradually come into being." But this development was not self-willed. If the States had to yield to the Government of India in respect of railways, posts, salt or custom, it was as a result of their subjection to the supreme political power of the country. The States demurred but they had no option but to submit. For political reasons their assent was required. And the consequence was the Federal Scheme arising out of the Round Table Conference.

After discussing the historical basis of the federation, the author has in the subsequent chapters analysed the provisions of the Act with regard to matters such as the accession of the states and the federation, federal subjects, relation of the federal centre to the states, federal finance, federal court, federal railway, cantonments, etc. Three chapters have been devoted to the question of tributes, ceded terriories and privileges and immunities. All these questions are important from the point of federal finance and thus the author has done great service to students of the Indian constitution by his clear analysis of these subjects. The last chapter deals with the question of Paramountcy which is not greatly affected by the federation. Paramountcy is still the naked sword enforcing obedience of the Indian States to the federation. "Paramountcy," says the author, "is thus made the federal sanction, and on its exercise depends the smooth working of the federation. Without paramountcy a ruler might bring the federal mechanism in relation to his state to a standstill by refusing to carry out the instructions given to him by the Governor-General with regard to the administration of federal subjects, and render the judgments of the federal court wholly abortive by neglecting to give effect to them in his state." Paramountcy is, therefore, the weapon for enforcing obedience to the new constitution and if it is so, the attitude of the Princes at the present stage is nothing short of comic.

The book is a very lucid survey of the constitutional framework, and I have no doubt, will prove greatly useful to the jurists as well as to the students of Indian political history.

BISHESHWAR PRASAD.

WORLD ECONOMIC SURVEY, 1938-39.

The League of Nations' World Economic Survey, 1938-39, was completed on the eve of the outbreak of hostilities in Europe. It covers events up to the beginning of August, 1939, and thus presents a picture of the world economic situation up to the date of the beginning of hostilities. During the first months of 1939 the world was making a rapid recovery from the major depression with which it had been threatened in the first half of 1938. This rapid reversal of economic conditions may be ascribed in part to financial measures taken in the United States of America and in other countries in order to stimulate the lagging demand for goods and services. But in the main it was due to increased expenditure on armaments and war preparations.

This issue—the eighth in the series—includes a number of specal studies. One chapter, for example, is devoted to a study of the economic effects of recent changes in the trends of population.

A second chapter studies the problems of public finance, and examines the extent to which the costs of rearmament have eaten into the national incomes of various countries.

The concluding chapter, entitled "The Economic Effects of War, Rearmament and Territorial Changes" summarises the main theme of the volume. Economic destruction in Spain and China and the reduction in the standard of living in Japan as a result of war; the economic effects of the territoral expansion of Germany; and the greatly increased intervention of the State in economic affairs for the purposes of national defence;—these are the main subjects of the chapter. In various other chapters the growing importance of political tension and of rearmament is emphasised in their effects on economic activity, on world trade, on hours of work and the demand for labour, on budgetary and monetary policies, and on commercial relations between the nations. The work on the whole is highly informative.

B. G. B.

THE BOARD OF ECONOMIC INQUIRY, PUNJAB. Publication No. 63 —Farm Accounts in the Punjab, 1936-37. By Labh Singh and Ajaib Singh.

This report is the thirteenth in the series of Farm Accounts. As before, the volume is divided into two parts: (1) Farm Accounts and (2) Costs of various methods of well irrigation. Certain changes in the method of presentation of the subject-matter have been introduced in the present report with a view to facilitate comparison. The work as usual maintains its high standard of efficiency.

We have been asked by the Editor of the *Modern Review* to review the December, 1939, Number of the *Review*. We are glad to notice that the *Modern Review* continues to maintain its high standard of journalistic efficiency and is in our opinion an excellent monthly. We always look forward to its coming and have always found it interesting and educative on most of the living topics of the day.

B. G. B.

THE BOARD OF ECONOMIC ENQUIRY, PUNJAB. Publication No. 64, Relationship between Fertility and Economic and Social Status in the Punjab. By S. P. Jain, M.Sc. 1939. Price annas eight.

The Board are to be congratulated on undertaking this new line of investigation. Mr. Jain has broken entirely a new ground in India. As observed by him such studies have been carried out in European countries but so far none was available for any part of India.

Within the limitations imposed upon them by the investigators themselves the Inquiry is both comprehensive and thorough. But we may be allowed to point out that the data selected do not admit of yielding any dependable results regarding the relationship of fertility and economic and social status, and that because the classes selected could not be classed as really of distinct social and economic status.

Section 5 contains the results of the study and shows that fertility increases slightly with the rise of economic status. Mr. Jain has divided the people into six classes, leaving aside for the moment the Professional and the menial classes. In this classification the Lower Agriculturist (III) and the Lower Non-Agriculturist (VI) are those whose income is below Rs. 200 per annum. Middle class is that which enjoys an income of Rs. 200 to Rs. 400 per annum. Upper class consists of those who have income above Rs. 400 per annum. Here if we notice any increase of fertility from the Lower to the Middle and the Upper, then it can directly be attributed to better feeding, better clothing and better conditions of living. To my mind, socially all the various classes belong to the same category, the only noticeable point of difference is in the annual income. From Rs. 200 or less per annum to Rs, 400 or more per annum per family merely indicates passing of persons within the same social status from penury and want to the possession of ordinary requisites of life. And so far as this goes one could *a priori* expect greater fecundity and greater survival rate with fuller food, clothing and so on. And it is thus which the investigation brings out clearly and inductively.

Confined as the investigation was to rural areas, it could hardly be expected to bring out those marked influences of social stratification or fertility and other allied problems which one comes across in the widely based studies of this nature in the west. The only implication of this criticism offered by me is that we cannot draw any far-reaching conclusions from this investigation. But this does not direct its importance as a laudable and very successful investigation first of its kind in India. We congratulate the Board and Mr. Jain again, and hope that the investigations on a wider basis will now be taken in hand.

B. G. B.

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THE SOCIOLOGICAL ELEMENTS IN PRICE ECONOMICS

BY

RADHAKAMAL MUKERJEE

Economic technology and price economics as bequeathed by Ricardo and Mill form the principal subject-matter of economics treated in a manner which still indicates a stronger filiation to physics or mechanics than to biology and the other social sciences. The scope of price economics is defined by marking off an economic sphere from the general, social and institutional life including only those phenomena on the criterion of their having a price or of their relevancy to explaining prices. Its test of analysis is the marginal method, which has been used for the examination of the price-making process, of the conditions of equilibrium of separate prices and of prices in general both of commodities and services.

The marginal or differential method, with the use of the equilibrium theory as a hypothesis, suits very well the explanation of phenomena and relationships of prices and values when these are abstracted from the general social forces and trends for isolated scientific analysis, such abstraction being regarded as a postulate on account of the prevailing systems of competition and ownership, and the

supposed mobility of labour and capital. Suffice it is merely to mention here the laws and doctrines that have been formulated in this sub-field—the theory of value and its derivatives, the theories of rent, wages, profit and interest and capitalism, the theories of productivity and income and the theory of economic cycles. Many of these are described in later classicism as natural "laws" dealing with quasi-automatic, self-regulating forces of the material world whose functioning is not much deflected by the human factor or the social situation. Even Pareto in his sociology, comprehends the factors dealt with by economic theory as the major element of his category of "logical action", which also includes the technological and the "Machiavellian" type of political action.

The Social Basis of Activity and Value.

The classical and neo-classical theory of value postulates the "economic man" with his self-interest, his utilitarian calculus and his personal liberty in consumption. The theory of value shows the relationship between the arrangement of scarce means and the pursuit of any set of ends which the individual is postulated to deliberately seek alone with an unusual endowment of foresight and in isolation from his living connection with society and the ideal world. Any social science, excluding economics, tells us, however, that man's ends are not individual but social; nor do these ends elicit endeavours singly, but these are integrated in a complex system of ends. Many ends again are derivative and instrumental; others are intrinsic and universal. The satisfaction of these latter social and universal ends is just as much a consumer's satisfaction as the consumption of food and other necessaries of life and it arises equally from the distribution of scarce means between alternative uses. The state control of food supply during a war illustrates how production aimed at the satisfaction of social ends or the control of the relations of these ends and all others, cannot possibly be treated by a theory of competitive adjustment.[1]

[1] E. F. M., Durbin, "The Social Significance of Theory of Value." *Economic Journal*, December, 1935.

A chronic food shortage or famine requiring a re-arrangement of the scarce factors demanded by social ends which may be in conflict with that required by the individual ends similarly produces a new economic calculus. Again, society controls the sale of drink and obscene literature, commercialised recreation and military service requiring the production of these goods and services to stand in a different quantitative relation from that established under conditions of free competition. The quantitative relations of services is altered in different social situations, and by divergent cultural patterns. Sex-satisfaction is invested with a price in the market not merely in prostitution but also in the accepted family ethics, when nature establishes a disparity of the proportions of sexes or the group regulates the circle within which alone marriages can take place by restrictions of endogamy, exogamy and hypergamy. Dowries and groom prices are influenced both by natural sex-proportions and social standards. Man's ends could only be satisfied within the limitation set not merely by the scarce means of nature but also by social ends and group standards. These latter affect all economic calculuses and ends.

The development towards socialism and collectivism implies that we cannot isolate a sphere of economic life peculiarly suited to a particular set of ends. Where state control does not regulate or select the relations between ends and resources, it is group life, customs and institutions which determine at every point the allocation of man's limited resources, and the combination of goods and services which he prefers. Thus the value of the marginal products of mobile resources is influenced at every point by social and institutional norms and preferences. Without an insight into the methods and principles of collective choice and into the integrated system of ends of a community the theory of value will be inadequate. The individualistic outlook of the classical theory and the doctrine of marginal utility disregard the reality of man's relations with the society, which is a pre-condition of both values and efforts, and which regulates the production and economic calculus according to an integrated system of values evolving in the process of social selection and survival. Values thus are essentially social

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products and relations, though the individual is relatively independent and unique as the economic agent. Economic values arise out of quantitative relations in the integrated system of ends whose satisfaction is limited by nature, time or social choice, price being only a pointer reading. The chief principles, which underlie the valuation process, are not marginal utility, nor the marginal productivity of resources, but the equilibrium of the three orders of social norms as the invariably antecedent sociological datum. It is the force of the social norms, which underlies the subjective estimates of value in the market or the forces of demand and supply. The economic theory of value and prices needs to be assimilated to sociology by the extension and variation of the normative and institutional postulates, and freed from the mechanical outlook of the abstractive, neglective procedure of Ricardo and Menger.

The Social and Psychological Postulates of Classicism

Apart from the fact that classical economic theory fails to comprehend the reality of the social process, and includes several postulates of the freedom of the individual as a self-sufficient, rational and independent creature, which are not tenable, it bridges the gulf between the individual's freedom and nature's determinateness by standardising the market process and regarding the social traditions and technical institutions of the heyday of capitalism in Europe as the norm. A very particular phase of social evolution was regarded as absolute something like the matter, energy or either of the natural sciences.

Free competition, mobility of labour, private property, social tradition and technical equipment that guarantee mobility whenever the market process demands, all these are psychological and social postulates which transform an arbitrary subjective preference of means and ends in individual bargaining transactions into exact and measurable laws and relations of exchange. The laws and relations would be "exact" in so far as the psychological and social postulates might materialise in a concrete society. In fact, the laws of exchange have the same empirical character as the laws of

history and social development with which the former are interlaced. It is the logic of sociology which will, therefore, determine the degree of probability of the so-called exact laws of exchange.

Custom gives its Meaning to Exchange Relations

The family order in savage society, the village communal and guild system in India and China, the feudal organisation in medieval Europe and the collective system in Russia, all establish an authoritative general scale of preference under which labour, property and the exchange system work. In classical economic theory instead of the authoritarian system we have a hypothetical norm which secures some kind of "harmony" between the wants and activities of "the economic man" in a concrete market and through time with the forestalled supply and demand of the future. Logically speaking in every case a given society with its custom or scale of preference gives its meaning and degree of probability to the market relations but in the case of classical economic theory " the liberal society of early capitalism " is camouflaged as the general order of an economic system. With the classical economist the camouflage is sought to be successfully maintained and the precise mathematical trend of economic behaviour formulated through a most unscientific interpretation of custom as something which is exterior to man. Customs and social habits are regarded as causes of economic friction, as barriers which deflect normal economic functioning, the standard of which is set by limited personal observation and species of introspection characteristic of the older Anglo-Saxon psychology.

Custom and status should not be treated as irrelevant labelled as mere causes of irregularity in economic behaviour. These embody the living fabric of human and social values which guide the distribution of scarce means among the members in society and within which the society's general scale of preference and the productive process are organically set. To illustrate, in primitive economic life we often find a variety of festivals, amusements and expeditions which are intimately connected with the pursuits of arts and crafts,

the practices of agriculture and horticulture and the rearing of cattle. Malinowsky in his studies has shown how such expeditions and recreations are largely the source, of the interest of the Melansions in life, giving zest to labour and making it worth while to produce. When the British abolished the custom of head-hunting it destroyed for the Melansions much of their interest in living, for with such people head-hunting was not merely a ceremonial exercise, accompanying enterprise but was also connected with their various economic activities. With the loss of interest due to dismantlement of head-hunting the Melancsians largely stopped working, and depopulation of Melancsian proceeded aface. In medieval feudal society, both the standard of living as well as economic functions were assigned by custom on rigid class lines, and wealth was one of the incidents of status in the feudal hierarchy. It was class status which demanded not merely the kind of special tasks such as the hunt, state craft, and chivalrous pursuit for the lordly classes, and agriculture and handicrafts for the subject classes, but it also determined the kind and quality of food consumed, clothes worn and dwelling places lived in by the different social groups.

Sombart observes, there is not one sign of love for economic activity throughout the whole medieval epoch in Europe. High days and Holy days were very numerous, for nearly half the year people were idle and economic activities were carried on no faster than was necessary to provide for the customary requirements of the people. The feudal order was an orderly, harmonious and stationary society in which free enterprise was condemned as avarice. Prices were approximated to a standard of fair rates and wages were governed by economic conventions.

In the Eastern village communities we find a similar superimposition of custom and status upon economic functions. In the village communities, custom prescribes roughly a minimum standard of wages corresponding to the average family needs of an industrial group. For every class of artisans ministers and dependants of all sorts in the villages the plane of living is not allowed to be encroached upon by the forces of mere demand and supply. Status as well as

customary wages have all been determined according to a social norm which replaces the bare struggle of living by an endeavour of the well-being for the individuals, for the occupational groups and for the community as a whole.

In the contrasted exchange relations we have indicated, custom or the scale of valuation is not external to the market process but becomes an economic datum, deflecting prices, wages and volumes of production from the levels to which forces of the market might lead in the classical analysis.

The Social Pre-suppositions of the Theory of Distribution

The analysis of the distributive process and relations as part of the exchange system implies even more sectional sociological postulates which cannot be universally valid, have proved inadequate and have been the subject of much trenchent criticism. Neither the classical law of population nor the iron law of wages, neither the theory of mobility and equalisation of wages and profits nor the theory of voluntary saving and changes in the rate of interest, have stood critical examination. There were all sociological and psychological "Middle principles" which were interpolated into economics without a critical analysis. Mill observes in his Logic: "When states of society and the causes which produce them are spoken of as a subject of science it is implied that there exists a natural correlation among these different elements; that not every variety of combination of these general social facts is possible, but only certain combinations; that, in short, there exists uniformities of co-existence between the states of the various social phenomena." These uniformities are corollaries from the laws of causation, since each co-existing state is itself the effect of causes. The laws of sequence, if discovered, would give us the middle principles or *axiomata media* of sociology.[2] Apart from the corresnondence which historical economics discerns between stages of economic development and forms of domestic organisation, law, polity, and ethical and religious beliefs,

[2] Compare the discussion in Ginsberg, *Sociology*, Chapter I.

there is in a more limited field correspondence between social distance or mobility and the disparity or equalisation of economic conditions and opportunities which influence rent, interest and profits. Classical economics accepted uncritically certain intermediate generalisations of sequence and built their theory of distribution on these.

The growth and accumulation of capital and the extension of the margins of cultivation do not follow in logical sequence everywhere, but were implicated in the special geographical and technological background of the industrial revolution in England. The accumulation of capital goods was the social demand of an age which has not as yet forgotten the prodigality of the knights and barons of the Middle Ages with their clientele of idlers, menial servants and retainers. Man must save, and invest his surplus in productive enterprise or employ it himself in directing labour to increase the instruments of production in order that a class of business men can arise, and the profit motive was rationalised as the prime mover of the transition from unsound to sound production economics. Similarly the distribution of landed interests as between the three separate classes, landlords, capitalist farmers and hired labourers, the gradual extension of cultivation to inferior zones, and the existence of an agricultural surplus for the subsistence of the cultivators are all, as amply shown by critics of the Ricardian theory of rent from Jones and Carey to Mitchell, special historical conditions. Further, the classical economic theory of distribution took into consideration only one phase of the problem of distribution, viz., that concerned with the sharing of income as between three distinctive income classes, *viz.*, the landlords, the business men and the wage-earners to the complete disregard of the problem of distribution among individuals. Such an abstractive procedure was connected with the manner in which the problem of distribution was approached by business men in England during the prolonged Corn Law controversy. Ricardo approached the contentious issue, debated in the country and in the Parliament, in the light not of the prevalent agricultural distress but of the incidence of the high duty on foreign imports of wheat on the costs of industrial production.

Ricardo's theory was coloured by the irritation of the manufacturing districts in England against the new scale of import duties, and the lowering of the scale which was due to the opposition of industrial leaders was simply a victory not of the laws of economics but of the manufacturing interests whom Ricardo represented. The Ricardian system assumed a conflict between the landlords and the rest of the community including business classes which does not hold good of all stages of agricultural and industrial development. The hostility to landed interests, characteristic of manufacturing England in the early part of the nineteenth century, has become now a part of the heritage of economic theory.

Need of Recasting the Hypotheses relating to Technology and Supply and Demand

But once these came to be regarded as economic laws rather than social data relating to the supply of land, labour and capital, and the adjustments of the productive process in time, the process of supply and demand was guaranteed a stability and persistence. It is in this manner that the psychological postulates of the economic man and perfect competition were buttressed by a series of surreptiously introduced hypotheses as regards technology, social stratification and evaluation, nay, of social and technical progress as a whole. But economic maladjustments did not fit in with the hypothetical construction of the dynamics of social progress, and demanded more realistic approaches. An interesting instance is afforded by the theory of non-competing groups, which is based on the central fact of social gradation in an industrial society and illustrates the process of assimilation of sociological principles into the framework of the neo-classical theory of wages. Similarly the classical theory of international values has been re-interpreted on the basis of the recognition of non-competing groups as a sociological datum. Again the theory of imperfect competition focuses attention to the conditions necessary to perfect competition which were neglected by the abstractive procedure of analysis. As a matter of fact, the present

tendency even among the neo-classical writers has been generally to cast away the hypothetical sociological framework, whose existence cannot be proved by deductive reasoning, and to construct a new co-ordinate system of empirical research based on concrete realistic survey. There is a more rigorous definition of the conditions which are necessary to an equilibrium in order to analyse why a concrete situation differs and leads to a different result. The picture of the equilibrium as it deals with the forces in a dynamic situation is also modified in order to be made into a verifiable hypotheses.

In the classical analysis it was not merely the evolution of the technique of production but change even in the objective social factors such as the systems of individual ownership and distribution, the growth of population and the dependence of the levels of wages and profits on the latter, were all deprived of the character of independent data and historical facts that must exclude deduction by general reasoning. The modern system of mass standardised production is such that the economic position of labour and consequently its freedom have been considerably reduced as a result of the constant processes of substitution and the impossibility of labour owning the means of production. The present distributive system with its growing disparity of wealth and opportunities has made it impossible for the price mechanism to secure the maximum aggregate welfare of the community. What shall be produced and consumed is determined by effective demand and for a considerable section of people in industrial civilisation with low purchasing power the demand is not effective. The stratification of income groups representing incomes of different sizes and types and of labour and rural populations determining allocations of demands of goods and services, affects large distortions in the structure of production. The disparity of incomes with its sequel of industrial unemployment creates a hiatus between money expenditure and money returns. In a community of persons having unequal needs and incomes prices are not the precise measure of efforts and satisfactions and the correspondence between money cost and real cost is necessarily inexact. Nor does the price mechanism in a regime of free competi-

tion ensure under modern technological conditions the circular flow and improvement of production of goods and services not to speak of its social efficiency which the orthodox economists postulate.

On the supply side of labour we can hardly do justice to the social man whose incentives and aims of labour are alike governed by the family and the group by treating population as a process continuous with the supply and demand of the objective world. The notion that population automatically increases in response to demand for goods and services and regulates itself by external checks has become incompatible with modern social ideals. The experience of different countries that a rise in the standard of comfort under modern conditions leads to a voluntary limitation of the birth-rate and that poverty and malnutrition, with loss of inhabiting capacity, co-exists with prolificacy, has raised the population problem from the economic to the social and ethical planes, even among the orthodox economists. In fact, with the spread of democratic ideas and institutions the notions of optimum and over population have become highly significant in all industrial countries along with a desire for regulating population policy. The economist's outlook in population study is, indeed, altogether changed, the emphasis being shifted from the spirit and order of the law of supply and demand in the breeding of children and maintenance of standards of living to the means of social control of numbers and the aims and objects of such regulation, due regard being paid to the qualitative and selective aspects of the movement of population. As a matter of fact, the trend of population had long ago been found to be peculiarly incapable of elucidation in terms of the law of supply and demand; and in fact classical economists had to turn to some kind of biology and study of family life and moral standards but their biology was wrong and their sociology even poorer.

It was when dynamic conditions and trends were analysed that the sociological postulates of economic and social progress as an automatic self-regulating process which the individual has to obey and which partakes of the irresistable objective character of his material environment, were laid bare in its nakedness.

The distinction between the stationary and dynamic equilibrium illustrates the assimilation into the traditional economic theory of the cumulative effects of changes in time of human numbers, land and the state of the arts of production, the two latter changes being given less prominence. The eighteenth century norm of the natural order limited the search for order in changing social phenomena to the conditions imposed by fixed external nature and basically fixed original nature of man. An unchanging frame-work of private property and the free exchange and competitive system defined the course of social change, which was always reduced to the level of the individual, the starting point as well as the goal of classical economic theory. Ricardo did appreciate the economic influence of changing social phenomena but as he proceeded with the analysis of the changing economic world with the help of the Malthusian Law of population increase and the accumulation of capital as a subordinate, the whole abstractive procedure became a single factor explanation not to speak of the rigidity of his laws conceived as timeless and generally independent of human institutions and evaluations. The moving economic reality was distorted when only one factor, *viz.*, population, was considered as implicating the new situation without an adequate consideration of the changes in the relations between the social and individual phenomena assumed by him as fixed. Many of the explanations of business cycles in recent times similarly commit the error of positing the changes of only one factor to which all the other factors making for cyclical oscillations are subordinated. Here, again, the approach to dynamic economics as a modified static scheme hardly takes into account the economic "whole situation." Significant changes of the theory of equilibrium in the later classicism also illustrate attempts to reach general trails of changes not merely in one particular economic phenomenon in the course of time but also in the relations among various economic phenomena. No longer are the simple conditions of perfect and stable equilibrium and the uniformity and rigidity of human behaviour in a closed system posited. Both the environment with its technological elements as well as patterns of economic behaviour are presented as chang-

ing in interdependence with one another in the system of dynamic economics.

In the dynamic economic analysis one does not derive the social from the individual by linking the various social phenomena such as wages, profits, interest, amount of capital, number of factors and every factor in the concrete economic situation with the individual behaviour as the antecedent datum. Such features of economic life as are treated as self-evident in static economic theory as the equality of prices and the mobility of labour and capital are relics of the older atomism and utilitarianism. The kernel of static economics is thus characterised by Kuznets: "The decomposition of social phenomena into the individual activities which determine them, the demonstration that the various phenomena are all inter-connected through this individual activity and are marked by persistent characteristics in the variety of their concrete manifestations—this analysis is the essence of static economic theory."[3] In the dynamic economic analysis there is emerging the larger sociological view that the social process and not individual behaviour is the datum. Thus individual behaviour becomes only one of the factors in social change and this also is regarded as socially conditioned. The analysis of social phenomena, and their mutual relations in a changing total situation would no longer be reduced to the level of the individual, whose motives and behaviour are no less plastic and mobile.

Thus, the picture of equilibrium would deal with the congeries of social phenomena and of their changing relations and be construed not as a finished sketch of the actual world but would be inevitably modified as the forces which are at work in the actual world develop and bring about through their cumulative and reciprocal effects a new "total situation." The picture of the equilibrium is what Max Weber would call an ideal construct and the fuller development and refinement of the theory present not only a careful statement of the conditions necessary to equilibrium but also

[3] "Static and Dynamic Economics" in the *American Economic Review*, September, 1930.

the reasons why concrete situations are different producing different results.

Veblen's Theory of Institutional Genesis and Change

But it is socialism as well as institutional economics in America through their complete departure from the concept of equilibrium and their shift of interest from the value and distribution which marked a more striking break between the traditional static and dynamic economics. The Marxian analysis of economic change implicated in the institutions of ownership and social classes in capitalistic society showed a broader understanding of the interdependence of the various social phenomena and of social progress as a whole than classical economics has reached even at its best. In fact, the Marxian interpretation contributed in the largest measure towards the breaking away from static economics. Veblen's theory of institutional change showed a greater impress of the later biological and psychological sciences than historical materialism. While with Karl Marx the lever of economic change is class-antagonism, arising out of a rational calculation of divergence of interests, in Veblen it is social conditioning. The cleavage in modern industrial society is due, according to Veblen, not merely to the institutions of ownership and individual accumulation of wealth served through the price system but also to contrasted "habits of life and thought" or cultural patterns of the various classes according as they are habitually pre-occupied with the machine or business enterprise. While Veblen regarded the sociological and psychological analysis of the economic classes in Marxism as too inadequate and abstract, he also accepted a philosophy of history far different from that adopted by classicism. With Veblen, civilisation is a continuous conflict between the predatory and the industrious, which has assumed different phases with the evolution of the social structure and the industrial arts. The pirate chieftain of one epoch becomes the captain of industry of another; the robber baron levying upon peaceful trade becomes the financial magnate. Alvin Johnson well observes: "The profits of high finance which orthodox economics imputes to the

function of efficient organisation of factors of production and which Marxian economics treats as a deduction from the product of labour are to Veblen the usufruct of a rich and versatile industrial technique developed out of ancient germs by the proficiency of modern science." Veblen showed a profound understanding of social psychology in estimating the influence of attitudes and habits of life and thought along with " selfish calculating class interest" in bringing about the historical movement. He observes " while class interest may count for much in the outcome, this answer is plainly not a competent one, since, for one thing, institutions by no means change with the alacrity which the sole efficiency of a reasoned class interest would require."[4] Men's habits of life and behaviour, Veblen had the keen eye of a social scientist to see, are the outcome of long conditioning, and are " of too pervading a character to be ascribed to the influence of a late or brief discipline." Man's behaviour changes due to a " drift of habituation " rather than a dispassionately reasoned adaptation of conduct to the circumstances of the case. Thus, it is not Marx but Veblen who is right in the analysis of the mechanics of social change, which is effected less through " a selfish calculating class interest " in respect of ownership, production and distribution and more through a change of the " propensities and attitudes " in the classes carried over from the past. Finally, with Veblen are introduced for the first time into economics Drawinian ideas of the selection and survival of institutions and patterns of behaviour. " Institutions are habitual methods of carrying on the life of the community in contact with the material environment in which it lives. The evolution of social structure has been a process of natural selection of institutions. Social structure changes, develops, adapts itself to an altered situation, only through a change in the habits of thought of the several classes of the community; or in the last analysis, through a change in the habits of thought of the individuals which make up the community. The evolution of society is substantially a process of mental adaptation on the part of individuals under the stress of

[4] *The Place of Science in Modern Civilisation*, p. 314.

circumstances which will no longer tolerate habits of thought formed under and conforming to a different set of circumstances in the past."[5] It is true that Veblen in his treatment of economics, as a branch of biology, did not define the nature and significance of economic institutions, and how these differ from other institutions or prevalent habits of thought, how other institutions govern or modify ranges and types of economic habits and conduct, and, again, how all institutions and patterns of behaviour form a complex and integrated whole. Yet his conception of the dynamic character of the social structure, of the prevalent or dominant types of attitude and aptitudes, of social relations, habits of life and temperament of the individuals, showed a great extension and deepening of dynamic social considerations in economics. Thus his criticism of older economics is well justified. "For all their use of the term "dynamic" neither Mr. Clark nor any of his associates in this line of research have yet contributed anything at all appreciable to a theory of genesis, growth, sequence, change, process, or the like, in economic life."

J. M. Clark suggests that if the mechanical connotations of the term "dynamic" make it seem appropriate to limit it to quantitative changes, then the more qualitative changes stressed by socialistic and institutional schools such as the development of the basic legal institutions of property, personal liberty and contract, of forms, of business organisations and of competition, or dynamic changes or long-run evolution in human nature itself, may be called evolutionary. As a matter of fact, Veblen did consider that economics stands in need of rehabilitation by following the evolutionary method and laid down its major premises, labelling the orthodox economics as 'taxonomy.' Evolutionary economics dealing with changes of social phenomena in their totality and in their mutual changing relations must come into grips with standards of social choice and ultimate values. Clark draws attention to old evaluations and judgments carried over unconsciously into fields of dynamic economics where different conceptions are called for. Utilita-

[5] *The Theory of the Leisure Class*, page 192.

rian standards of evaluation persist, despite the fact that they are based on a static view of human nature and should be radically modified or superseded when a dynamic view is adopted. Private property is too often judged as if it were a fixed unit character instead of an evolving thing. The student may easily fail to recognize that the concept of capital as a self-replacing fund of material means of production is a static concept and needs to be broadened into a whole family of related concepts for purposes of dynamic study. Here discrepancies between savings and investment in capital goods may be vital to a theory of cyclical movements, while pecuniary yield and physical productivity may be well-nigh divorced from one another. Criteria of evaluation and judgment need to be searchingly scrutinized to see that they are not invalidated by implicit static assumptions.[6]

As industrialism advanced and technology was revolutioned the breaks and discontinuities in the sphere of production and distortions in the spheres of exchange and distribution challenged fresh reconstruction of dynamic economic theory. The process of substitution, the cause of wide-spread unemployment, led to organised unionism and collective bargaining, which deflected wages from the calculable level. The development of monopoly, a result of the increasing risks to capital goods, has created new problems of prices and distribution which overstep occupational and national boundaries and belie the smooth and calculable circular economic flow. The later classicism assumes the possibility of a particular source of supply being confronted by a downward sloping demand curve in the case of absolute monopoly. It is however now realised that the phenomenon is far more wide-spread than has been commonly supposed or implied and the chief basis of this claim is actual observation. The phenomenon occurs so frequently that it has suggested recently the doctrines relating to imperfect competition. If imperfect competition, decreasing costs and the absence of a stable equilibrium in the general level

[6] J. M. Clark, "Statics and Dynamics" in the *Encyclopædia of the Social Sciences*; also "Accomplishments and Prospects of American Economics."

of output as a whole be recognized, the psychological theory becomes a valid explanation of trade cycle phenomena without reference to miscalculation or maladjustment in organisation. An optimistic or depressed mentality, which leads to the choice of a higher or lower level of equilibrium of the industries, is governed by group influences, that thus enter into the structure of the market and prices. The psychology of different types of entrepreneurs and bankers, which fights the now normal discontinuity and immobility of the forces of the market, the peculiarities of industrial technique and organisation which effect large and discontinuous changes in the use of the resources of labour, capital and machinery, the gesture of the financiers which influences the rate of interest, the hoarding and investment of capital and the large and sudden changes in industrial expectations, all these represent new social factors in economic development as a whole, which dynamic economic theory has to reckon with.

In the various theories and hypotheses of business cycles, whether there is a stress of weather influences or mental attitudes of the bankers and the entrepreneurs, or, again, of the factors of technology, the system of distribution and high finance, the sociological "whole situation" outlook is clearly emerging. Movements of output, prices and credit, all act cumulatively in both directions and are often interlaced with one another as well as with the inequalities of the distribution of wealth, prosperity, privilege and economic power. The dynamic economic theory is ultimately concerned with the totality of conditions which determine the equilibrium of the level of output as a whole in contradistinction to the particular equilibria of each industry which are determined by the demand and cost conditions of each. In a recession many particular disequilibria may be set up, but the leading characteristic is a general cumulative running down of activity. It is the failure to understand precisely what factors determine this general equilibrium of output as a whole that is also responsible for perplexities concerning movements away from it or changes in it. The general equilibrium of output could be studied only with reference to the industrial "whole situation." It is subject to varia-

tions inherent in the modern economic and industrial process. Agricultural fluctuations connected with meteorological cycles tend to promote pulses of stimulation and depression of industries. Piatt Andrew observes in this connection; "One cannot renew the past forty years without observing that the beginning of every movement towards business prosperity and the turning point towards every business decline was connected with the outturn of crops." There is also a self-renewing rhythm in the real costs of production in the mechanical-technic processes in general. During the later stages of a depression there is a cumulative increase of the efficiency of labour, a progressive writing off of inflated capital charges and a progressive overhauling of methods of technique and organisation which breed renewed activity. On the other hand, during the later stages of a boom there is a progressive recourse to inferior instruments of production, a progressive utilisation of over-tired and recalcitrant labour, wasteful methods of management, and inferior business leadership, which ultimately breed collapse. The principle of acceleration, which is adopted by many cycle theorists and is especially made familiar by J. M. Clark, is an illustration of one of Tarde's famous laws of imitation and sympathetic resonance. The process of acceleration (intensification) consists of a disproportionate increase or decrease of stocks and working capital, the rate growing or decreasing with the stage of production.

Again, investments in the fixed instruments of production and transport which are large and expensive are discontinuous and these also exhibit some connection with discoveries and inventions that have their spells. Robertson in a succinct analysis of the causes of trade cycle refers also to certain legal and social features of the economic system which promote instability of prices and output. Competition aggravates miscalculation and consequently the violence of the trade cycle. The wage system leads to a real disharmony between the interests of employing class which dictates the course of production and those of society as a whole. The present systems of private property, ownership and distribution of wealth engender a chronic tendency to oversaving, manifesting itself during the boom in the construction of

more instruments than will be able ultimately to find remunerative employment, and during the depression in, among other things, a piling up of idle bank-balances. Professor Keynes stresses this disharmony, and also attributes this to the fact that men's savings periodically exceed their investments, *i.e.*, the money represented by these savings is hoarded in the banks or elsewhere and so "wasted." He pictures the economic misfortune which overtakes a banana-growing commonly which wastes its medium of exchange by a somewhat similar process.[7] Wilhelm Ropke rightly points out that over-saving is an essentially dynamic concept not a static one. It is also a sociological concept. During the up-swing of a cycle, there is a general rise of incomes which corresponds to the increase of the social net product made possible by the mobilisation of idle productive resources. Upto a certain point consumption and accumulation, reckoned in absolute figures, both rise without any visible strain. This is a factor which is irreconcilable with the whole trend of post-Bohm-Bawerkian theory of capital, which is individualist, and abstractive and treats consumption and accumulation as strict and absolute alternatives. Further, writers like Francesco Vito urge that the increase of the entrepreneurial form of capital formation and a general change in the social structure of incomes which is characterised by an expansion of profits and other variable incomes relatively to the less variable incomes, and which is therefore equivalent to a rise of the incomes more likely to be saved rather than spent, are one of the major causes of the boom. The assumption of social stratification and of its effects on saving and expenditure is derived from sociology. The remedy proposed is to increase the purchasing power of the wage-earner, whose desire for necessaries and comforts is held to be steadier and more elastic than the desire of the rich for luxuries.[8] Here also we are faced to face with changing data of institutions and norms of social welfare

[7] Keynes, *A Treatise on Money*, Volume, I, pp. 176—8.

[8] Robertson's article on "Trade Cycles," *Encyclopædia Britannica*.

and harmony which are being assimilated into the corpus of economic theory.

Introduction of Sociology into Dynamic Economic Theory

In the study of credit and trade cycles, then, we find an appreciation of the sociological "total situation" in the following: (1) the stress of ecologic unstability as influencing agricultural and industrial output; (2) the recognition of an automatic and self-renewing rhythm in the mechanical-technic equipment and structure of modern industry built on the foundations of a changing social-legal frame-work of laws and recognised freedoms; (3) the appreciation of the effects of social gradation and the social structure of incomes on saving and expenditure; (4) the analysis of social, economic and psychological factors in close action and interaction and the conviction that the isolation of the business aspects falsifies the true causal relations and (5) the historical perspective that the modern structure of business and industry with imperfect competition and monopoly, unemployment of labour and risks to capital and domination of the motives of seeking profit and economic power are all features of a specific historical order and phase of economic organisation in Western Europe. Thus modern dynamic economic theory is based on the ground plan of technological, institutional and psychological data. The chain of analysis of the economic process should, therefore, be interpreted at every link by a sociological examination of both causes and results. The timidity and optimism of business leaders whose miscalculations create "a great wave of erroneous judgment" depend upon domestic political uncertainty and international friction which may warp their judgments and accordingly aggravate the violence of the trade cycle. The loan policy of banks and currency policy of governments are also largely deflected by political considerations and by social policies, with reference to expenditure on public works for mitigating unemployment. The social distance between the rich and the poor perpetuates a chronic disharmony between the interests of the employers

and of society as a whole, which normally leads to unstability of prices, output and employment, while the formation of trusts and combines often aggravates it. The entire social and industrial structure with its unequal distribution of wealth and freedoms, promotes excessive saving and accumulation of capital and unremunerative investment in the instruments of production on the one hand and excessive and idle bank-balances on the other. Thus certain inseparable social features of the modern industrial structure are connected with an automatic maladjustment between output and consumption, and only a fully sociological examination of the different phases of the trade fluctuations and their backgrounds can complete dynamic economic theory.

Classical economic theory pre-supposed a sociology without knowing or admitting it. Dynamic economic theory is reconciling itself with sociology in order to be able to solve the insistent problems presented by the real world, which no longer remains a distant ideal. Expelled by the front-door where Professor Robbins has recently hung up the challenging notice of "No Admission," sociology is now entering by the backdoor, the theoretical structure of economics.

GANDHIJI'S ECONOMIC IDEALS AND CREED

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Gandhiji, like Sismondi, the great French economist of the 18th century, allows ethics a fundamental place in his economic doctrines. Ahimsa or non-violence is the very soul of his idea. It is a matter of unbounded faith with him, without which life, much less a mere economic aspect of it, is not worth living. It is not merely a way of communion with God but something which can be lived both subjectively and in one's relation with the outside world. It is represented by Gandhiji not merely as a creed for the benefit of an individual but as the living basis of all civilised social behaviour of any people. One has to believe in it without any mental reservation and in all circumstances, irrespective of the consequences that might follow in its wake. All material progress has to be achieved on this basis and all that comes into conflict with it has to be discarded. There is no place, therefore, in Gandhiji's scheme of things, for such an Imperial order as may result in violence by one country against another or for such capitalist organisation as may lead to violence by one class against the other.

This is Gandhiji's unchangeable creed which colours all his views on economic or social matters. Take, for instance, his attitude towards large scale productive organisation of to-day. Like Sismondi he appeals against rapid industrialisation and the reckless use of machinery at the inevitable expense of human labour. Gandhiji would oppose factory organisation as it exists today, because, to his mind, it leads to concentration of wealth and power in the hands of the few and the forced unemployment of the millions. This is the height of violence and, therefore, Gandhiji would have nothing to do with it.

Small Scale Industries

In his History of Economic Thought, Haney says that Sismondi " urges the restriction of invention and advocates steps towards giving some property to the labour. In addition to all this there are many vague appeals to statesmen to try to stay the struggle for increased industrial production." This is what Sismondi wrote a century and a half ago. Gandhiji today echoes his sentiment when he says, " the big industries can never, they don't hope to, overtake the unemployed millions. Their aim is primarily to make money for the few owners, never the direct one, of finding employment for the unemployed millions." Referring to conditions in India he continues to say that " dead machinery must not be pitted against the millions of living machines represented by the villagers scattered in the seven hundred thousand villages of India."

Gandhiji, be it noted, is not against industrialisation as such or even against the introduction of machinery if it could employ people for all times and in growing numbers. This, however, as is commonly known, is not always possible under the present system of industrial organisation. Machinery, in the initial stages of its introduction, disturbs the existing economic order and recklessly enough throws people out of employment. This happened in England in the initial stages of the Industrial Revolution when millions of workers lost their old vocations in life and sought relief in frequent emigrations to new colonies and far-flung parts of the British Empire. This has, in fact, happened wherever industrialisation has been tried on a large scale. India is poor and mainly dependent on agriculture and, therefore, as a remedy of pressure of population on soil, rapid industrialisation is suggested by economists and administrators alike. Gandhiji's idea and plan of action, however, is quite different. He does not seek relief through industrialisation at all. According to him, it will further increase unemployment in the country and make confusion worse confounded. " Mechanisation is good," says Gandhiji, " when the hands are too few for the work intended to be accomplished. It is an evil when there are more hands than required for the work as is the case in India."

Urbanisation is taboo to Gandhiji which he regards as a bye-product of machinery. He says that "strange as it may appear, every mill generally is a menace to the villagers." He wants people to stay on land and employment to be taken to their very door. To this end he seeks the revivification of spinning wheel and indeed of all cottage industries in the villages, to use the idle hours of the people and make them produce all their necessities of life. It is small industries rather than a big factory which he regards as the panacea for all that the country has suffered from. "Industrialisation on a mass scale," says he, "will necessarily lead to passive or active exploitation of the villages as the problems of competition and marketing come in. Therefore, we have to concentrate on the village being self-contained, manufacturing mainly for use . . . and not as a means of exploitation of others." Thus Gandhiji's creed of non-violence would restrict both the size of production and of the market in which it has to be sold.

Rationalisation of Industries

Rationalisation has often been suggested as an unfailing remedy for industrial crisis. Gandhiji's views, however, are quite the reverse. He believes with the Trade Unionists that any attempt to economise by a more scientific and intensive use of machinery would result in greater unemployment among the labourers. Here Gandhiji is at one with the labour supporters and some socialist thinkers in the West. It was estimated a year or so ago that in U.S.A. about 75 people were then doing the work of 100 people as they were employed in 1929. Rationalisation, on the whole, is calculated to have thrown out of employment about one-quarter of the employed people in U.S.A. alone during the last ten years or so. The same rationalisation of industries has been authoritatively suggested to meet the industrial crisis in India but there is no stronger opponent to it than Gandhiji's creed of non-violence and Ahimsa.

Machine and industrialisation has everywhere been accompanied by recurring crises and periods of acute unemployment and distress to the millions. The malady has

been diagnosed by different people in different ways. The socialist would suggest lack of equilibrium between production and distribution as the basic cause of the trouble, others attack the methods of production, based as they are, on machinery and large-scale organisation. Gandhiji's views on these crises are somewhat different as also the remedy which he suggests for adoption. He blames for it concentration of wealth more than anything else, *i.e.*, the placing of the whole machinery of wealth production in the hands of the few. Economists would cynically enough take all this as the inevitable concomitant of industrialisation and progress. Gandhiji, however, is not quite as pessimistic and has an alternative to suggest in village self-sufficiency which he regards as comparatively free from the defects of the present organisation. He argues that " without simultaneous distribution on an equally mass scale the production can result only in a great world tragedy." He continues: " machinery would concentrate production in particular areas so that you would have to go in a roufnd about way to regulate distribution, whereas if there is production and distribution both in the respective areas where things are required, it is automatically regulated and there is less chance for fraud, none for speculation."

Gandhiji would not accept concentration in any form whatsoever. He would not have even the decentralisation of productive machinery through the distribution of electric power unless it gave a measure of real independence to the worker. " It is true," says he, " that you will be producing things in innumerable areas, the power will come from one selected centre. That, in the end, I think, would be found to be disastrous. It would place such a limitless power in one human agency that I dread to think of it."

Gandhiji's scheme of village self-sufficiency has no place for such things as relief funds or insurance against unemployment, both of which he rejects as falling far short of the actual needs of the people as also degrading in their after-effects. Gandhiji's sole concern is to reinstate man in the position he held before the advent of machine. He wants man to be the owner of his business, working in his own home and producing in a self-sufficient village most of

the necessities of his life. "There is," writes Gandhiji, "to be no competition foredoomed to failure, with foreign or swadeshi corresponding articles. The villagers are to be their own buyers. They will primarily consume what they produce. To quote him "when production and consumption both become localised again the temptation to speed up disappears. All the endless difficulties and problems that our present-day economic system presents, too, would then come to an end. There would be no unnatural accumulation of hoards in the pockets of the few and wants in the midst of plenty in regard to the rest as is happening today for instance in America."

Background of Indian Facts and Figures

These are Gandhiji's views in general in regard to the nature and consequences of modern industrialisation. Let us now co-relate these to India's economic life as it is today. It is well-known that about 90% of the population in India is employed in agriculture and allied occupations, 10% in industry and of these not more than 2 per cent are in the so-called organised industries. India's main industries, as we know are, cotton, iron and steel, sugar, jute, cement and paper. These are all developed to a certain extent but the number of people they employ is incredulously small and even if they developed further to meet the entire demand of the country they would absorb hardly 5% of the population. In other countries things are quite different. In great Britain, for instance, as many as 80% of the people are employed in heavy industries, but this large percentage is made possible by the existence of overseas markets where their goods can be taken and if necessary dumped on the unsophisticated humanity of colonies and other backward parts of the world. This is a necessary corollary to large scale production and large scale employment of people in heavy industries. Gandhiji rejects all this as being in utter conflict with his doctrine of *ahimsa*, and, would, even if it were possible resist its adoption in India. "Don't you see," wrote Gandhiji once to a prominent business man, "that if India becomes industrialised we should need a Nadir Shah

to find other worlds to exploit, that we shall have to pit ourselves against the naval and military power of Britain and Japan and America, of Russia and Italy? My head reels to think of these rivalries. No, I am clear that whilst this machine age aims at converting men into machines, I am aiming at reinstating man turn machine into his own original estate." Violence, in any form, economic or political, is thus a taboo to Gandhiji and, therefore, no scheme of empire economics can ever fit in with his ethics or way of looking at life.

India's main problem, according to Gandhiji, is one of improving the economic status of her rural population, by utilising their idle time and by creating such conditions as would revive the old decayed industries on the one hand and on the other would induce people to buy nothing but swadeshi goods for the encouragement of these industries. Everything that brings the country nearer this he would support and everything that drifts her away from it he would discard.

Gandhiji is not opposed to machinery in every form. There is a place for it in his scheme of things, provided it serves the end that he has in view. "The heavy machinery," he says, "for work of public utility which cannot be undertaken by human labour has its inevitable place, but all that would be owned by the state and used entirely for the benefit of the people. I have no consideration for machinery which is meant either to enrich the few at the expense of the many or without cause to displace the useful labour of many." This defines the limit which Gandhiji wants to recognise in the adoption of machinery in our industrial society and incidentally it shows him as a believer in a qualified form of state socialism.

Gandhiji's belief in state socialism is, however, hedged in many ways. He would, of course, recognise state control or management in basic industries but he would limit the state interference in economic affairs as far as possible. His objections against the full-fledged state socialism are twofold. Firstly, he fears that the state organisation of industries will grow too unwieldy in size and will ultimately succumb to the same weakness as has overwhelmed the system

of private capitalism, namely, the lack of equilibrium between the production of goods on the one hand and their consumption by the people at the other end. "Distribution," in Gandhiji's own words, "can be equalised when production is localised, in other words, when the distribution is simultaneous with production. Distribution will never be equal so long as you want to tap other markets of the world to dispose of your goods." State socialism however is not conceived in terms of local production and distribution, Gandhiji therefore would give his qualified support to it.

Secondly, according to Gandhiji, state socialism would, by virtue of the power that it would place in the hands of the few people, would easily lend itself to group violence, and, therefore, is not acceptable to him in the extreme form in which it is usually presented by its exponents.

It is obvious, therefore, that so far as Gandhiji is concerned, and so long as he wields his present influence with Congress, there seems to be no imminent possibility for large scale state enterprise in India. Russia has an appeal for several people but according to Gandhiji, "it is an economic order in which both production and distribution are controlled and regulated by the state. Well, it is a new experiment, and how it will ultimately succeed I do not know. If it were not based on force I would dote on it. But today since it is based on force I do not know how far and where it will take us."

Russian ways of organisation thus do not tally with Gandhiji's basic creed of life, and, therefore, as has been seen above, would not have his ready approval. It is small scale industries, on the other hand, which receive his ready approval and under his influence would receive adequate support both from the state and the people at large. The present organised industries as cotton, jute, cement and sugar will continue as best as they can, but if Gandhiji had his way all state help will be withdrawn from these industries and they will be gradually decentralised through education of public opinion and the growing dislike of the people for the products of big industries. Gandhiji is, heart and soul, for the revival of cottage industries, for these alone according to him can become a source of support of India's mil-

lions of unemployed people. These do not divide the people into rich and poor nor are they calculated to encourage empire mania or any other form of organised violence.

Gandhiji is not a socialist in the orthodox sense of the term but whatever he says or does is weighed heavily in favour of those who are subjected to exploitation and constitute the lower classes of society. Like Saint Simon, he is not opposed to the institution of private property but he insists on its treatment as a trust from God to be worked and used in the interest of the people at large who are the real beneficiaries and not the owners who are in the position of trustees. He is opposed to concentration of wealth in all forms in the hands of a few, and would have it, in the Ram Raj which he seeks to establish, diffused and spread among as large a number as possible. Of the present industrialised countries Russia is undoubtedly the least vicious: it keeps riches under control and helps to improve the economic status of the poor. State capitalism is from all view-points better than private capitalism but, since its foundations are laid on force it will, according to Gandhiji, also end in chaos and anarchy. This is, therefore, to be shunned as an ideal to be worked for and he gives preference to his alternative scheme of small industries based on individual property and self-sufficiency of the village.

Efficiency Scourge

In a socialistic country the motive of profit does come to an end and there is obviously not much room for exploitation of one class of people by another. The profit motive is replaced by social organism, by a system of corporate production and distribution of goods in the community. The system is, however, indissolubly linked up with machinery and factory organisation which aim at efficiency and production on a mass scale. Gandhiji cannot reconcile himself to this state of affairs, for he believes with Bognor that the greatest scourge of our civilisation is efficiency and the quest for more and yet more production. Borsad has said in his book "*Ugly Civilisation*" that "efficiency that is quintessence of factory civilisation is the real disease which the

factory has inflicted upon mankind. Comfort has to be sacrificed at the altar of great God efficiency, under socialism precisely as it has to be under capitalism, because the factory system ceases to be economic, unless it is efficient enough to absorb the institutional burden which is its inescapeable concomitant."

This is also Gandhiji's view. Machinery is not taboo to him. He regards spinning wheel as a type of machine and would indeed accept machine as an instrument of production so long as it did not result in unemployment and so long as it administered to the needs of man and not become the be-all and end-all of his existence. "I am not opposed to machinery," he says, "unless it concentrates production and distribution in the hands of the few, for I hate privilege and monopoly. Whatever cannot be shared with masses is a taboo to me." According to Gandhiji, the introduction of machinery in the socialistic regime has to be as much controlled as in the capitalistic regime. Man must not become a slave to machine and must see to it that the ultimate values of life are not overwhelmed by the twin evils of efficiency and overproduction.

Gandhiji's approach to socialism is quite different from others. "The socialist," he says, "that India can assimilate is the socialism of the spinning wheel." The present unemployment, idleness of the millions will lead to bloodshed and endless strife in the country and as an alternative to that he suggests a social order in which the spinning wheel will occupy the idle hours of the people and provide them with the necessary source of livelihood. Mahadev, Gandhiji's chief disciple, says that "unless production is tacken on to a home industry civilisation and divorced from factory organisation, mere socialisation will throw us from the frying pan into the fire."

Conception of Democracy

Another direct corollary from Gandhiji's belief in nonviolence is his conception of democracy. He is not an orthodox Benthamite, for, like Adam Smith he believes in the desirability of state interference in certain spheres of

national life, but like Adam Smith again, he seeks the limitation of state interference as far as possible. He believes with Thoreau that "that Government is best which governs the least." He regards constant state interference as the negation of the principles of non-violence, for he believes that "when people come into possession of political power, the interference with the freedom of the people is reduced to a minimum. In other words, that which runs its affairs smoothly and effectively without much state interference is truly democratic. Where such a condition is absent, the forms of government is democratic only in name."

Democracy is not only a people's government in the orthodox sense of the word. It is a state which he calls Ram Raj in which "sovereignty of the people is based on pure moral authority" and which Gandhi seeks to establish on the development of human personality. Everything that goes to suppress it, be it the state interference or the economic oligarchy of the few, is to be shunned. "Indian economic independence," he says, "means to me the economic uplift of every individual, male and female, by his or her own conscious efforts." Be it noted, that for economic salvation he wants the individual to work and not to depend merely on state protection. Anything that is imposed from the above is not conducive to the real development of the mind and body and, therefore, defeats the very object of all human progress. It is for this reason that Gandhiji is so emphatic on the revival of cottage industries. It will not only increase the purchasing power but, what is more, it will revitalise human personality, encourage creative genius in the man and bring out the very best in him. "Gandhiji," says Mahadev, "wants to revive India of pre-factory age where Kabir sprang from the weaver's caste, Tukaram from the peasants, Chokhamela from the so-called untouchables, Raidas from the cobbler's caste, Gora from the potters and Dhanna from the carpenters." It is said that machinery's greatest evil is its standardisation. It produces things which are homogeneous enough and on a large scale. Man becomes just a link in the vast machine of production, to work mechanically and at the dictates of others. His creative genius grows rusty and he becomes a helpless tool

to be used in the interest of his capitalist master. Gandhiji wants to end this exploitation of all that is best in human life. He seeks to establish the independence of man by placing the very means of livelihood in his own hands.

The Indian struggle for swaraj indeed is to be judged on this line. The present constitution may give relief from a kind of tyranny and coercion but will not by itself cause the full development of national and individual life, which according to Gandhiji, is not wholly dependent on the measure of political liberty that we may possess. Even if we attain it we may miss it because of inertia and too much dependence on outside help. And even if we have it not we may find ample opportunity to develop and enrich our individual and corporate life albeit the many political handicaps in our way. That is why Gandhiji concentrates himself on the constructive aspects of India's national work. He renounced all direct connection with Congress and has wholeheartedly thrown himself into the uplift work for Harijans and for the spinning association and All-India village organisation. " I admit", he says, "that there are certain things that cannot be done without political power but there are numerous other things which do not at all depend upon political power."

Approach to Socialism

Gandhiji's ideology in fact is not far different from socialism. The difference, whatever it is, lies not so much in the objective to be attained as in the approach and the methods to be used in attaining that object. His aim is the full development of human personality but not through coercion or a bloody revolution, nor even through a forced dispossession of the rich classes of what they possess. His method is that of self-help, the proverbial under-dog making desperate efforts himself to improve the conditions of his life and create such an atmosphere as will be quite in conflict with the existence of vested interest. " Real socialism," he says, "has been handed down to us by our ancestors who taught: 'all land belongs to Gopal, where then is the boundary line? Man is the maker of that line and he can

therefore unmake it.' Gopal literally means shepherd. It also means God. In modern language it means the state, *i.e.*, the people." Land, according to Gandhiji, is thus, in origin the property of the state and it is man's sin that it got identified with individual ownership. Gandhiji, however, would not adopt force nor even legal machinery to dispossess the landowners of their existing rights in property. He would start from the other end and help the tenants and dispossessed classes in improving their economic condition till they are one day restored to their original status. "I have no doubt," he says, "that we can make as good an approach to it (*i.e.* socialism) as is possible for any nation, not excluding Russia, and that without violence. The most effective substitute for violent dispossession is the wheel with all its implications. Land and all property is his who will work it. Unfortunately the workers are or have been kept ignorant of this simple fact." This sounds somewhat mystical but it is obvious enough that Gandhiji sees in the revival of cottage industry a sure means of raising the economic level of the people and at the same time of strengthening their moral background as to enable them to achieve and retain the ultimate objective of full economic independence.

And, here one may pause and analyse the usual charge sheet that is brought against Gandhiji. He is dubbed as a reactionary, as one whose cult of the spinning wheel constitutes a dead wall against all progress and is calculated further to supress the already low standard of living in the country. Gandhiji points out a double fallacy in the usual arguments relating to standard of living. To begin with, he does not believe in the bonafides of the capitalist class. "Their aims," says he, "is mainly to make money for the few owners, never the direct one of finding employment for the unemployed millions." If the workers are allowed a better standard of living it is done merely in the interest of the capitalist himself. For one thing it would reduce the bargaining power of the workers. They become addicted to certain wants and it becomes increasingly difficult for them to shirk work or stay away from it as a means to coerce the employer. They are in a way permanently tied down

to their slavery though the surroundings are made congenial enough for them to work. They are fed properly as so many domesticated animals, their health is looked after as so much of an improved asset in the hands of the capitalist employer. This is but a snare for the unsophisticated worker and the only escape left for him is in the abolition of ownership and direction of business in his own hands. This, it need hardly be said again, is made possible in Gandhiji's scheme of village reconstruction.

The second fallacy involved in the argument to which Gandhiji draws attention is this that improved standard of living in India, unless it is secured with general improvement in swadeshi industries, will become an instrument of incalculable harm to the country. In India there is already enough of unemployment and misery caused by dumping foreign goods. If our workers' standard of living is improved and if they are put in possession of more to spend on these imported goods it will simply amount to so much of our purchasing power being exported to other lands. Every pie that is spent on foreign goods in a country like India which imports manufactured goods and exports foodstuff and raw materials necessarily means throwing more people out of employment and causing a further decay in our home industries. The doctrine of raising the standard of living, in Gandhiji's opinion, is thus very pernicious in the present state of India's economic structure. The only way to help the people is to help in regaining the lost economic independence of the village where people can consume mostly what they produce and can therefore lay the foundation of a system of national economy which will bring about an equilibrium of production and consumption on one hand, and a simultaneous rise in the economic level of the people on the other.

Growing Population

Closely allied to the standard of living is the problem of India's ever growing population. These two questions are usually linked with each other: the standard of living, it is pointed out, can never be raised unless the number of

the people is in the first instance considerably reduced. The population theme, as we know, is the pet theme with Indian economists though, here again, their views are in conflict with those of Gandhiji.

What are Gandhiji's views on the subject? Does he identify himself with Malthus or with the school of neo-Malthusiasm, deliberately working for the restriction of number of people in one way or another? Or is he a believer in letting the population grow, even if it is to yield gun-fodder to appease the hunger of military giants or as a means of stemming the process of decay in number among the cultured and civilised classes of the people? Does Gandhiji align himself with any of these currents in Western thought. The answer is in the negative, for Gandhiji's approach to the question is essentially India's based as it is on Indian ways and habits of life and on economic facts as they present themselves today. It is clear that there is no casual connection in India, as it may be in other countries, between fecundity and volume of income among different classes of the people. Gandhiji is conscious of this fact. He accepts it at its full value and is not prepared to consider it purely from the mundane viewpoint. He regards marriage as a sacred trust in life, a union between husband and wife which has its main purpose in the continuation of the human race. There is no other aim to matrimony and to Gandhiji a mere sexual pleasure is taboo, as highly immoral in every sense of the word. Gandhiji has the sanction of practically all great religions of the world which, to say the least, are not yet spent up forces in India. These religions have their followings in the country and the cult of restricting the number of people, even if it were desirable on other grounds, would not be a practicable proposition in India. To quote from Gandhiji again, he says: "Birth control to me is a dismal abyss. It amounts to playing with unknown forces. Assuming that birth control by artificial aids is justifiable under certain conditions, it seems to be utterly impracticable of application among the millions. It seems to me to be easier to induce them to practice self-control than control by contraceptives. This little globe of ours is not a toy of yesterday. It has

not suffered from the weight of our population through its age of countless millions. How can it be that the truth has suddenly dawned upon some people that it is in danger of perishing of shortage of food unless birth rate is checked through the use of contraceptives?" These are, in a nutshell, Gandhiji's views on the subject. The only way to restrict the number which Gandhiji is prepared to recognise is abstension from marriage which is impracticable enough in India with her early and universal institution of marriage. Artificial contraceptions, as we have seen, he rejects straightaway. Therefore, it can be said that he has no panecea to offer so far as the problem of over-population is concerned. His object and his efforts are mainly confined to finding out new avenues of employment on land or in cottage industries. He is not worried either, as other people are, by the growing number of people as, according to him, the main asset of a person is his or her labour. So long as one can find a useful avenue for one's labour the question of rising population does not bother Gandhiji or people of his way of thinking. He says that, "in my system, it is a labour which is a current coin, not metal. Any person who can use his labour has that coin, his wealth. He converts his labour into cloth, into grain. If he wants paraffin oil which he cannot himself produce, he uses his surplus grain for getting the oil. It is exchange of labour on fair and equal terms."

Foreign Capital and Enterprise

India's industrial progress, unsatisfactory as it is, has been largely secured by the impetus given to it by the Great War, by discriminative policy in tariffs, by financial Autonomy convention and by increasing wages and labour charges in England and in other western countries which were naturally placed in a position of disadvantage as compared to India's home industries. Foreign capital and enterprise, however, was not slow to adjust themselves to the changed conditions. Instead of dumping their goods in India, as they did before, they brought in the organisation and capital within the protective walls of the country.

A large number of foreign companies have been consequently registered as so many Indian concerns in recent years. They have done this in a perfectly legal manner. There was no hindrance in their way, and to safeguard them against any future attack on their interest there is a definite clause provided in the new constitution which will bar the central government from adopting such discriminating measures as may adversely affect the interests of these newly formed companies.

Congress is naturally enough perturbed over the situation and at the instance of Gandhiji has passed a resolution as a protest against the prohibitive clause and declaring the Congress attitude of combating it at the proper time. Gandhiji regards the power of discrimination as a necessary weapon in the hands of the Indians. There can be no fair competition between the dwarf and the giant, and to quote his own words, "to talk of no discrimination between Indian and English or European is to perpetuate India's bondage . . . . . I have no doubt that a free India will have the right to discriminate."

The strength of Gandhiji's conviction in this matter will be realised by those who remember the protracted negotiations that he had with the Viceroy before he was persuaded to attend the second session of the Round Table Conference in England. He insisted on the insertion of the words "in interest of India" after the word "discrimination" and also succeeded in getting an admission from Lord Irwin that picketing of foreign cloth shops in India would not amount to a discrimination or against foreign interests in any way.

It is not clear, however, as to how Gandhiji reconciles himself to giving protection to mill industry even if it is for the purpose of meeting foreign competition. Perhaps he regards this as the lesser evil of the two: at least India's capital and labour will find room for employment in the country. Everything, indeed, that is done to support swadeshi is bound to react favourably on the indigenous mill industry. Although Gandhiji does not approve it, he accepts it as an inevitable evil. He would himself, however, work exclusively for the uplift of small industries

and to the big industries he would lend his support only when they are amenable to Congress discipline in the regulation of the prices of their goods and the wages of their employees.

This is the end of our review of Gandhiji's opinion and his attitude towards some of the basic economic problems of the country. This has been dealt with at some length not only because it breaks new ground in economic thinking but because it may yet be of far-reaching consequence in the near future in the practical administration of the country. Indeed in the recent past, signs were not wanting to show which way the wind was blowing. Gandhiji's views together with the facts disclosed in provincial budgets and the way in which political parties had shaped themselves were a clear pointer to the nature of the immediate future that India, but for the present war, was likely to inherit.

THE ECONOMICS OF SOIL EROSION AND ITS INFLUENCE ON NATIONAL LIFE*

BY

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Introductory

The problem of soil erosion is a problem in human geography. It is a problem of keeping the country at home.

The classical economists regarded land as the indestructible asset of the nation. But really it is far from it. Land can be damaged, destroyed or dissipated, just like coal, gas or petroleum. Soil erosion is robbing the country of its wealth. Millions of acres of our productive soil are being ruined by over-wash. Rain is man's best friend as well as his greatest enemy. Water has its own duty to discharge—its proper work to do. The surface flow—if it is left uncontrolled—is a great danger. When controlled, it is a priceless blessing. Of course, we can never completely stop erosion through rain or wind. Millions of acres in the world have already been destroyed by erosion while many more millions are heading the same way. In India, erosion is constantly going on along the entire hill sides as well as on the plains below. The evil is pronounced already in the Punjab where sheet erosion and gullies ruin farms and cultivation. Sheet erosion never ceases—especially on sloping areas. The cumulative effects of erosion are very serious in the end. "Is this a permanent country?"—this is the question that is now being asked everywhere in America. If the soils go, we go with it also. Our forests and our cultivated lands are being gradually washed out and they are adding to the debit side of our national capital account.

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The country goes to sea—that is the problem we have to face. Salt and mud have now become[1] the centre and the circumference of a new national policy in the West. If the country is to remain a productive agricultural unit in the world, it must anchor its soil and protect it against the ravages of rain and wind. We must stop the farm from going to the sea. The soil is too good and too valuable to be lost in this way. The top 6 to 12 inches of the farm soil is the most valuable asset of the farm. Posterity must be protected against human folly on the one hand and the blind forces of nature on the other. It is a tall order, but the job has to be done. It is worth doing and some one must do it. Science must help to bring back our runaway farms. We must recapture the lost soil and restore the old farms.

The Nature of the Problem

The erosional unbalance cannot be completely prevented but the erosion potential can certainly be reduced, corrected or arrested by a well-planned policy of soil conservation. It takes hundreds of years to form one inch of soil. H. H. Bennett, the great authority on soil science, holds that it takes about 400 years to form one inch of the top soil. The average depth of the productive top-soil varies from 6 inches to 1 foot and this represents the farmer's principal capital. This is being steadily washed out by continued erosion from year to year. The farm land is slowly moving towards the sea. This soil erosion is one of the principal causes of recurrent floods. Erosion control will automatically help in flood control as well. The control of soil erosion in U.S.A. has forced the question to the front as a major issue in national life. There is politics in soil and silt and its importance is so great in the vital life of the nation that the problem is said to be loaded with dynamite.[2] Every country in the West is now making frantic attempts to save the soil.

[1] Cf. Parkins and Whitaker, *Our National Resources and their Conservation* (New York, 1936).

[2] *Soil Erosion as a National Menace*, Circular 33: Government Printing Office, Washington, 1928. Also Report, National Conservation Commission, U.S.A., 1909.

We, in India, have also to draw our lessons from the advanced countries in the West and profit by their experience, research and practice in order to save our soil. That is our great asset and we cannot afford to lose it. Unless the battle against erosion is fought—and won—we have the desert in sight—looming in the distant horizon. The deserts are on the march and every day they are getting nearer. Our lands can be saved only if man and science both combine to carry on the fight.

The Extent of Erosion.

The extent of soil erosion has been carefully estimated in the Western countries but the estimates vary widely. It has been calculated that more than 513 million tons of soil are washed out to the sea from the American farms every year.[3] The Mississippi alone is responsible for 428 million tons.[4] A different estimate puts the annual wash-out in America very much higher at 1500 million tons.[5] Bennett calculated it at 3 billion tons. J. P. Buchanan estimated the annual value of erosional loss in America at 2000 million dollars.[6] That is the cost of per annual face-wash and who can deny that it is costly enough? The National Industrial Conference Board, New York, estimated in 1927 that one and a half billion tons of soil—and with it 60 million tons of plant food—are annually washed out in the U.S.A.[7] Estimates made by the Geological survey of U.S.A. showed that the surface of the U.S.A. is being removed at the rate of one inch in 760 years.[8] The old world gives us very vivid examples of soil erosion and its economic effects. The great cities of the early civilisations with their priceless

[3] Annual Report, American Soil Survey Association (1929) Bulletin 10.

[4] *Science*, April, 1929, p. 446-7.

[5] Agr. Engin: 10: 29 (Sept., 1929).

[6] *National Republic* (May, 1929). Also *Amer. Forestry* (June 9, 1928).

[7] *Report*, 1927, pp. 105—8.

[8] *Geological Survey: Water Supply* Paper 234 (1909), U.S.A.

treasures and valuable relics have been buried deep underneath the surface soils long ago. Archæologists are now slowly digging them out. They were buried by the continued erosion of the soil. The wastage of the soil was largely responsible for the economic collapse of China, Asia Minor, Central America and Africa. The fall of Rome was due—among other factors—to socio-economic causes which can properly be correlated to the exhaustion of the soil and a consequent decline in population. The fall of the old Mayan empire in America may also be traced to soil exhaustion and the consequent scarcity of arable lands. Huntington[9] points out how large areas in Central Asia have been buried under the sand-dunes and large inland lakes (*e.g.*, Lop Nor) in this area have now been lost for good. Ancient villages have been buried and all traces of ancient farming and old civilisations have been swept away. Soil is civilisation and the loss of the one inevitably means the loss of the other.

The Causes of Erosion.

Erosion is mainly of two types—*viz.*: Sheet erosion caused by rain and Eolian erosion caused by the wind. It depends on a variety of causes. Taking sheet erosion first, the variables which determine the overland surface flow as well as the amount that is absorbed into the ground-water reservoir are as follows[10];—

(*a*) The nature and type of the soil or the rock which determines the infiltration capacity of the soil. The porosity of the soil is an important factor. Loose or sandy soil will take in water more rapidly than clay soil. The black cotton soil in Central India is highly susceptible to erosion.[11] Hard and rocky soils will

[9] Huntington, *Pulse of Asia.*

[10] *Vide Physiography*—by R. D. Salisbury (p. 821).

Also *Surface Run off Control*—R. E. Horlon (in *Headwater Control and Use,* Government Press, U.S.A., p. 25.)

[11] See *Agricultural and Live Stock Journal of India,* 3, p. 238—45, May, 1933.

resist infiltration and therefore increase the surface flow.

(*b*) The topography of the surface. The gradient or slope of the land is an important determinant. Sloping soil helps erosion. Flat land is not so susceptible to erosion. A rapid downflow would mean a heavy loss of moisture and the lowering of the water table." From experiments made at the Ithaca Erosion Experiment Station,[12] it was found that water losses varied as follows:

Cover	Slope of land	Loss of soil (per acre).	Total loss of water-in p. c. of total precipitation.
Potato ...	14 p. c.	1055 lbs.	88·0
Forest	27 „	nil	·5
Grassland ...	20 „	nil	·2

(*c*) The rate and amount of rainfall—its intensity and duration—are the principal determinants of erosion. Heavy rainfall causes sheet erosion. Sheets of rain falling on uncovered land erode the land surface continuously over the whole country and they cause the greatest amount of erosion. The more rapid the rainfall, the less is the proportion that sinks in and the greater the proportion that flows out.

(*d*) The amount and type of the vegetation cover on the surface. If the soil has a good vegetation cover, the rate and the amount of absorption are both increased. Vegetation arrests the flow of the surface water and holds it much longer on the surface. It gives more time for

[12] *Conservation Farming Practices and Flood Control* (U.S.A. Dept. of Agr.), Misc. Pub. No. 253, pp. 63-4,

the water to go in and less to run off. A little calculation will show the average number of days every year that the soil is left uncovered under the various cropping systems. Erosional loss, of course, is not necessarily in direct proportion to the period of exposure but—other things being equal—the chances of erosion would be greater, the greater the period for which land remains uncovered. The amount of vegetative cover itself depends on a number of factors. Land denuded of vegetation is like a corrugated tin-roof. It sends down the water most quickly. When rain falls on the bare land the water just rushes down to the nearest stream or river. If the land is covered with good absorptive top-soil—"made porous by the hidden conduits of burrowing earthworms, insects and roots of plants" there is a blotter for rain. It absorbs rain water and discharges less of it into the streams. Vegetation forms innumerable tiny obstructions to the downward flow of the excess rain water which the soil is unable to absorb. Each leaf, each blade of grass or a tangle of roots is a nature's miniature dam holding its share of rain drops. Each burrow and each crevice in the soil opened by a root is a subterranean storage for water. A vegetation cover acts like a blanket while bare, non-porous, unabsorptive soil without humus sheds water quickly. It thereby increases the intensity of floods whenever there is heavy rainfall. The loss or decline of organic matter in the soil, the burning of grasses, over-grazing—all these reduce the cover and help denudation.

(*e*) Deforestation is another important factor—especially in the watersheds—which causes erosion. The steep hill-sides, once covered with grass or jungle have been brought under

cultivation and the resulting denudation has helped erosion. The slaughter of timber has proceeded steadily and remorselessly. The increase of population and the increased demand for food and raw materials have pushed the plough land upwards until the crop-line overtook the timber-line and then even went beyond it. Deforestation has reduced the moisture content in the soil and has decreased the water supply of the country. It has reduced the flow in the perennial streams, increased the intensity of floods, helped the deposit of detritus by wind and water and gradually reduced cultivation. It has increased aridity by the greater desiccating effect of wind and has considerably stimulated the erosion of the soil. Man has contributed largely to soil erosion through the steady denudation of the forests. It was a crime against nature and nature will not be cheated. She will insist on retribution. We pay for our folly and erosion is the price we pay for it.

Forest fires have also played havoc with the forests and destroyed our priceless assets. They have destroyed extensive forests in all parts of the world with catastrophic results.

(*f*) The dryness of the atmosphere, the altitude and elevation of the land surface—all these affect evaporation and precipitation and therefore the quantum of water flowing on the land surface. This, in its turn, determines erosion.

(*g*) The system of cropping also determines the rate of erosion. There are farming methods which will conserve soil and water just as there are other methods which will encourage soil and water waste. There are systems of crop rotation which will help or hinder the conservation of soil and water. Continuous

cropping and other uneconomic methods of land use give the soil no chance to recuperate and this weakens the soil's resistance to erosion.

(*h*) High winds cause eolian erosion by sand and dust storms. Sand as an eroding agent can be moved both by water and wind. In both cases, it cuts the soil. In America, these sand storms come with terrific force. Million tons of drifting sands are spread over vast areas, the sky is obscured almost to darkness and the cattle and sheep perish in thousands. These sand storms devastate the country and convert large tracts into miniature deserts.

The Evils of Erosion

The greatest evil of erosion lies in the gradual impoverishment of the soil. The removal of the top soil—rich in phosphorus—is a national danger. It is almost irreplaceable. Erosion is robbing the soil of its fertility. It is taking away the organic matter and the soluble plant food from our surface soils. Bennett estimated that about 20 times more plant food is washed away by erosion than by the total annual cultivation of crops in the U.S.A.[13] This naturally means lower crop yield per acre and higher costs of cultivation. The loss of soil and of plant nutrition is pushing up the cost of cultivation. The loss of valuable plant foods is upsetting agricultural economy. It interferes with our system of farming. Erosion is definitely creating large areas of sub-marginal land. It has destroyed in one generation soil that it took centuries to build. As such, it is steadily leading to a grave national disaster. The wreckage of farm land is proceeding rapidly. Our farms are being washed away. In the U.S.A. the annual cost of erosion is estimated at 400 million dollars in abandoned holdings,

[13] See Report, National Conservation Congress, U. S. A. (1909—12). Also *Rural Progress* (Dec., 1934).

Also Engin. and Contract, 66—306 (July, 1927).

reduced output and in the loss of fertility. This, however, does not include the damage, resulting from the silting up of streams, rivers and channels, lakes and harbours nor does it include the costs of repairing railways and roads. There can be no permanent system of agriculture until and unless erosion is controlled. Despite improvements in seeds and in methods of cultivation, despite the increased use of fertilizers, crop yields are not improving satisfactorily due to erosional losses. Fertilisers can supply the missing plant food but they cannot supply the humus particles which are washed away. In some places, there is over-wash of sand, gravel and stones which widely spread out on fields and farms. Thus, fertile soils are being converted into sub-marginal lands. "Erosion is a devastating chiseler which works tirelessly altering the topography of our agricultural terrain."[15] The Mississippi delta is the graveyard of thousands of farms. The farmer's profits that lie on fields and farms silently flow down the stream into the sea and are lost for ever. The continued erosion of soil is affecting tremendously the value of investments in land. Erosion is also filling up the rivers, channels and reservoirs with enormous quantities of silt. It increases the risk of floods.[16] It is no use creating storage basins and big reservoirs to moderate or divert the floods unless we can prevent them from being slowly silted up. Floods will become less frequent and far less destructive when the denuded watersheds are saved from erosion. The heart of the flood problem lies not so much in the amount of rainfall but in the amount of erosion. It is the silt carried down—it is the erosion potential that creates the most sinister aspect of the flood problem.[17]

The formation of deep gullies stretching right through the farms is another serious problem. The evil is growing to an appalling extent. The heavy rains furrow the slopes. When the slopes are steep, the furrows quickly become gullies. Splendid valleys and farms have been ripped to

[15] Report, National Conservation Congress, 1909—12.

[16] *Relation of Soil Erosion to Flood Control*: National Rivers and Harbours Congress, 1934 (Soil Conservation Service, U. S. A.).

[17] *Forestry*: 22-498-505. May, 1924.

pieces with gullies in Texas, New Mexico, Arizona, Colorado, Utah, California and other states in the U.S.A. Gullying and sliding cause extensive damages to the fields. Damages to waterways are extensive by the rapid silting up of rivers, reservoirs and water channels. Landslides are frequent and the cutting up of the river bank is much too common. The damages to high-ways, roads and railways are heavy and erosion is one of the biggest factors in pushing up their maintenance costs. The tax-payer pays but he does not care to know more about it.

In India, no reliable estimates have yet been made to find out the actual erosion rate in the whole of India. Piece-meal and isolated efforts have been made but they seldom led to any substantial results. A committee was appointed in 1916 to consider this question. The committee gave some data relating to erosion and surface flow. But no systematic scientific enquiry has yet been made into the problem as it affects the whole of India and the question now stands very near to where it did a quarter of a century ago.[18] It is time to make a concerted move in the matter so that an important national problem may receive the attention that it deserves. The Agriculture and the Forest Departments in India as well as learned scientific bodies like the Indian Science Congress ought to move in the matter and press for a national enquiry into the whole problem. The nature of the problem in other countries of the world and the methods of control usually adopted in them—which we discuss in a separate paper*—have profound lessons for us in India. We can profit greatly by them. A grave national disaster is looming ahead in the distant horizon. Can India afford to sleep over it?

[18] See Pusa Agricultural Research Institute Bulletin, No. 53 (1916). See also Proceedings, Punjab Engineering Conference, 1930). (This deals with erosion in the Himalayas.)

* To be published in this *Journal.*

THE BASIS OF LAND TAX: A PROBLEM IN APPLIED ECONOMICS

BY

BIMAL CHANDRA SINHA

Land tax, though not a very important source of revenue in most of the advanced industrial countries, forms none the less an important item in the list of taxes because of its political importance. But the basis of land tax is not the same everywhere and differs from country to country and epoch to epoch. Existence of different bases of land-tax gives rise to certain theoretical difficulties which it is necessary for the sake of clear thinking to clear up. For example, we are very often faced with the question: How should we determine rent? The answer which an economist is expected to give to this question is likely to be—and very often is—totally different from that given by the man-in-the-street, the actual cultivator and the lawyer relying chiefly upon the various provisions of the tenancy law regarding the fixation of rent. Consider for example two typical replies:—

> While an economist is likely to go back to Ricardo for explaining rent and the tax on it, the lawyer in Bengal would refer to the Bengal Tenancy Act (*e.g.*, Sections 50, 105, etc.), while the statesman would prefer to emphasise the influence of custom in this matter. Our problem is to investigate this problem and to find out, if possible, any comprehensive theory which can provide a rational explanation of various types of land-tax.

Two Preliminary Difficulties

It is necessary, before proceeding further, to clear up two preliminary difficulties. First, there is likely to arise some confusion of thought from the variety of tenures in different countries[1], for this variety often gives rise to

[1] *Vide*, Antonio De Viti De Marco: *First Principles of Public Finance*, for a comprehensive classification.

ambiguity of meaning of the term 'land-tax.' In a country with the owner-operator system, there is no intermediary between the owner-capitalist-cultivator and the state, and land-tax in this case denotes nothing but the tax paid by this owner-capitalist-cultivator to the State. But this is not the case in countries with a more complex system of land tenure. There are, for instance, thirty intermediaries in some cases coming between the land-lord and the tenant, and it is difficult in this case to find out what should be the proper meaning of the term 'land-tax.' While Ricardian analysis would assign the term to the tax paid by the actual cultivator to his immediate land-lord, Marshallian analysis, as we shall show later on, presents a different view; and lawyers would not perhaps distinguish between differert types of land-tax, if they had no separate legal existence. In our analysis of the problem, therefore, we would for the sake of simplicity assume at first a simple tenure in which there are no intermediaries between the cultivator and the State and take account of other complexities later on.

Secondly, we have also to consider the difficulties arising out of the peculiar nature of land as a factor of production. It is not necessary here to repeat the too familiar distinctions between land and capital; none the less it is important to remember that these distinctions gave rise to a peculiar theory of land-tax which did not belong to the wider category of taxation of profit; and though the recent trend is towards speaking of land as only a species of a genus, several peculiarities are likely to exist. It is necessary, therefore, to take account of them in any complete theory of taxation of land. Keeping these two limitations in our mind, let us proceed to consider the different bases of land-tax as suggested by writers young and old.

The Social Basis of Taxation: Smith, Ricardo and John Stuart Mill

We may conveniently begin our discussion with the doctrine of physiocratic writers. Their belief in the sterility doctrine gave rise to the theory of the *impot unique.* Taxation of land was justified because of the productivity of land. From the social standpoint, therefore, taxation of

land had a positive benefit. Later writers however looked frowningly on rent, which in their opinion was anti-social in character. The justification of land-tax, which is mostly the taxation of rent, was to be found in this anti-social character of rent. The object of the tax was to secure social justice and to further social progress, the basis of the tax being inherently social in its character. Land-tax was justified not because the tax-receiver performed any specific economic service; it was justified because rent should not be allowed to exist.

Stated categorically in this way, the contention may seem a little startling. But writers like Smith, Ricardo and Mill seem to develop this line of thought. It is interesting to note that Adam Smith forms the link between the physiocrats who glorified the *impot unique* and Ricardo who condemned rent; hence Adam Smith's 'neutrality,' as Professor Cannan puts it in his *Review* (p. 222). But, Ricardo believed in the anti-social character of rent:—

> We have seen that with every portion of additional capital which it becomes necessary to employ on the land with less productive return, rent would rise. It follows from the same principles that any circumstances in the society which should make it necessary to employ the same amount of capital on the land, and which should, therefore, make the portion last employed more productive, would lower rent. (*Principles*, Ch. 2)

Any attempt to raise the rate of rent, is, therefore, anti-social in its character. Hence the justification of land tax and hence also the necessity of distinguishing between a tax on rent and a tax on produce:—

> A land tax levied in proportion to the rent of land, and varying with every variation of rent, is in effect a tax on rent; and as such a tax will not apply to that land which yields no rent nor to the produce of that capital which is employed on the land with a view to profit merely and which never pays rent; and it will not in any way affect the price of raw-produce, but it will fall wholly on the landlords. In no prospect would such a tax differ from a tax on rent. But if a land-tax be imposed on all cultivated land, it will be a tax on produce and will therefore raise the price of produce. (*Principles*, Ch. XII.)

This social basis of land-tax is one of the corner-stones of Mill's theory also. Representing a period of transition,

Mill's theory is a curious amalgam of conflicting trends of thought. He hints at the law of diminishing returns in Chapter XVI of his book (p. 427, Ashley's edition). But he also hints that rent is not conducive to the welfare of the society as it is not productive in its character.

> Rent, when paid for the land itself, and not for improvements made in it by labour, is not a productive expenditure. It is not an outlay for the support of labour, or for the provision of implements or materials or for the produce of labour. It is the price paid for the use of an appropriated natural agent. This natural agent is indeed as indispenable as any implement; but they having to pay a price for it is not.
>
> (*Principles*, Book I, Ch. IV, Sec. 2, Ashley's Ed., p. 57).

But we notice in Mill a new element which marks the beginning of a new theory of land-tax. Note the opening sentences in his chapter on Rent where he uses the words "share of the produce."

> The requisites of production being labour, capital and natural agents; the only person, besides the labourer and the capitalist whose consent is necessary to production and who can *claim a share of the produce* (Italics mine) as the price of that consent, is the person who by the arrangements of society possesses exclusive power over some natural agent. The land is the principal of the natural agents which are capable of being appropriated and the consideration paid for its use is called rent.

It appears from the passage quoted above that Mill is here hinting at an economic basis of taxation. He justifies not on a social ground but on a purely economic basis, for the words 'share of the produce' can have no other meaning. But Mill was not able to carry this new line of thought to its logical conclusion and the crudity of his theory is apparent from the fact that though he hinted at an economic basis of land-tax, he could not make this clear inasmuch as rent in his opinion is yet a price of the consent of the landowner and not a return for some economic service. It was, however, left for Marshall to make clear the economic basis of land-tax. It may not be going too far to suggest that this twist given by Marshall was of immense practical importance for it was beginning to be unsafe for bourgeois economists to depend on the social basis of taxation as it

implied in its ultimate analysis complete demolition of the institution of landlordism itself.

Evolution of the Pure Theory : Alfred Marshall and Antonio De Viti De Marco

It is, however, wrong to say that Marshall did not agree with Ricardo or other earlier writers on many cardinal points. Marshall's special contribution in this direction is to be found in his classifying land as the leading species of a large genus, and income from land as one type of income from capital. He mentions this distinctly in his *Principles* when he writes " with all this, it is to be remembered that land is but a particular form of capital from the point of view of the individual producer" (p. 430). This, in fact, is the explanation of the following passage dealing with the merits of the British land-tenure:—

> The chief merit of the system is that it enables the landlord to keep in his own hands the responsibility for that part and only that part of property which he can look after with but little trouble to himself and little vexation to his tenants. His part consists of land, buildings and permanent improvements, and averages in England five times that which the farmer has to supply this five-sixths of the *necessary capital at a net rent, which seldom gives as much as three per cent interest on its cost and there is no other business in which the enterprising undertaker can borrow so large a part of his capital at any rate at all.* (Italics mine) *Principles*, p. 648.)

The basis of land-tax is, therefore, not social but econimic. Stated on a percentage basis, it is in the nature of interest; stated as a given sum, it is in the nature of rent.

Marshall's analysis, thus, is of great importance from the standpoint of theory as well as of practice. But his analysis, we may say, does not carry us far, for it can be most suitably applied to simple forms of land-tenure only. But in considering more complex systems of land-tenure, we have to take account of various other details which we do not find in Marshall's analysis. These details have been admirably developed by the Italian writer, Antonio De Viti De Marco. He begins by stating that it is not sufficient to state, as Marshall stated, that land belongs to the wider category of capital: we have to take account of further

details. The product of land in his opinion may be divided into five parts; rent in the technical sense, or Ricardian rent; interest on capital permanently invested; interest on working capital; the profit of enterprise; and wages.[2]

It is not enough to state that land-tax (rent?) is a return for some economic service; we should be more definite in our reply and point out the exact nature of that service. De Marco believes that the nature of that service is not always the same. For example, if we go back to the old system if emphyteusis, we find that the landowner and the owner of permanently invested capital are different persons, and that the landlord, therefore, cannot claim to perform the functions which occupy the second and third places in De Marco's list. There can, therefore, be no explanation of taxation of land without reference to the respective functions of the landowners and the tenants. In conclusion, he further develops the idea that land is only a species of a genus; while Marshall rested content with the belief that land is a particular form of capital, De Marco goes further when he states that income from land is not simply an income from a particular type of capital but belongs to a still wider category, *viz.*, profits.

Two Further Questions

The analysis of De Viti De Marco seems to dissolve some of the difficulties connected with the theory of land-tax. His analysis is in a sense decidedly an improvement upon Marshall's analysis because it goes deeper. But De Marco's theory is not sufficiently comprehensive as there may be at least two cases to which it does not apply. We pointed out at the very beginning that there are two difficulties in the case of a land-tax, one arising out of the peculiarities of land as a factor of production, another arising out of the complexities of land-tenure. Beginning with the first difficulty, we find that the theory of land-tax as developed by De Marco definitely lays down that the land-tax is one of the wider class of taxation of profit and as such must fall on profit.

[2] Antonio De Viti De Marco, *First Principles of Public Finance* (Jonathan Cape), p. 241.

This again implies that there should be no taxation in the absence of profit. But this is not the case very often, and the element of custom plays a very important part. The peculiar character of land very often does not allow annual assessment of income, as is done in the case of an income tax, and hence there is no variation of taxation on a scientific basis with variations in profit. We need not mention those extreme cases where the rate of tax has not been revised for a very long period, may be a century and a half; but even in sufficiently advanced countries, any scientifically adjusted tax, as envisaged above, has hardly been possible in the case of land. The result of this rigidity has often been that the rate of tax is fixed not with reference to the actual profit but with reference to the prevailing rates of taxation. The basis of tax in this case may for the want of a better name be called the 'customary basis of taxation,' for it is based on custom and not on any economic service.

Secondly, De Marco's theory does not take account of the difficulties arising out of the separation of tenancy and ownership. It is indeed rare to find a system of land tenure which conforms to the simple conditions assumed at the beginning and we find almost in every country different intermediate tenure-holders, intervening in between the State and the cultivator. It was pointed out by Justice Field that the number of such intermediaries is not less than thirty in some parts of Bengal. A number of questions at once crops up: Who receives rent? Who performs the necessary economic service in this long list of tenure-holders? Why the superior landlord receives payment from the next tenure-holder, even when the former performs no appreciable service? And so on. The basis of taxation is essentially 'legal' in this case the tax being what Mill called the "price of his consent." It has to be paid only because the landlord has, by hook or by crook, acquired the ownership of land to be cultivated.

We may, therefore, conclude that a theory of land-tax, in order to be sufficently comprehensive, must refer not only to the social basis of taxation but also to the economic, customary and legal bases. This does not mean that any particular system of land-tenure has one basis only, or that there

is any chronological succession of these different bases with the progress of civilisation, for, human mind being what it is, economic structure is bound to be complex in its character. This does not also mean that the last two bases are by any means justifiable. In fact, the recent trend of land reform is towards eliminating the last two from the theory of taxation. But as long as they actually continue to exist, it would be unwise to omit them, if our list is to be sufficiently comprehensive. We now propose to end this survey after testing our conclusions by applying them to certain concrete cases.

A Few Illustrations

Lack of space forbids any comprehensive survey of all major systems of land tenure and we can only deal with a few representative systems only. We have already quoted from Marshall to show how the basis of land-tax in England is, in his opinion, predominantly economic in character, the tax being more in the nature of interest than in the nature of 'rent'. We next turn to the owner-operator system of Canada which is another illustration of the land-tax having more or less an economic basis. The chief feature of the land policy in Canada is the development of the owner-operated farm. Methods employed for promoting ownership have varied from time to time. This policy has produced in Canada not only an example of the owner-operator family farm, but also perhaps the best example of the landlord, labourer and capitalist all combined in one individual. This simple tenure has avoided many complications and the basis of taxation is economic rather than legal or customary.

The system of metayage is an intermediate case in which the function is divided between the landlord and the labourer. While in the case of peasant-proprietorship the produce of land and labour belongs wholly to the labourer, in this case, that produce is divided,—but divided between two classes only, the labourers and the landowners —the character of capitalist merging in the one or the other as the case may be[3]. The principle of the metayage system,

[3] Mill, *Principles of Political Economy*, Book II, Ch. VIII, F. 8

wrote J. S. Mill, is that the labourer or peasant makes his engagement directly with the landowner and pays, not a fixed rent, either in money or in kind, but a certain proportion of the produce or rather of what remains of the produce after deducting what is considered necessary to keep up the stock. This plan, Marshall believed, enables a man who has next to no capital of his own to obtain *the use of it at a lower charge than he could in any other way* and to have more freedom and responsibility than he would as a hired labourer. The landlord in his opinion has to spend much time and trouble either of his own or of a paid agent, in keeping the tenant to his work; and he must charge for these a large sum which though going by another name, is *really earnings of management*. The basis of taxation here too is perhaps predominantly economic in its character.

The Special Case of Bengal

On the other hand, we have the case of Bengal where the economic basis is almost non-existent. Marshall held long ago that the payment by peasants in Bengal is not 'rent at all.' In replying to a question of the Bengal Land Revenue Commission (still sitting on enquiry), the British Indan Association has stated in its memorandum: "Our Committee holds that the existing rents paid by cultivation are settled by an arbitrary rule of law and custom, sanctioned by the Tenancy Act; the scientific principles have found no room." It is in fact literally impossible for all the tenure-holders to perform some economic function and the right to receive payment from the next tenure-holder rests chiefly on a legal basis. Nor should the influence of custom be underestimated. Though the rate of rent is revised from time to time—in the upward direction mostly—yet the rate is not varied every year. Rent, therefore, must be paid, profit or no profit. The injustice of the system is obvious, and any scheme of land reform should make an attempt to change the basis of taxation.

p. 302 (Ashley's Edition): and De Viti De Marco, *First Principles of Public Finance*, p. 245.

NOTES AND MEMORANDA

Some Observations on the Marketing of Wheat.

Wheat, although second to rice in order of importance as regards the area under cultivation in India, is a basic agricultural commodity, and plays a more important part in the economy of the country than rice. It is an agreed fact that in order to judge the prosperity of an agricultural country one must look to the price level of wheat. The Government of India took a right step in realising the importance of wheat marketing and made this the subject of their first report which is a comprehensive volume of 450 closely printed pages. This report contains an enormous wealth of information and is very moderately priced (Re. 1-4). In its twelve comprehensive chapters the report provides much valuable information which is indispensable to all those who want to study the marketing problems of agricultural products in this country. The whole machinery of marketing wheat from the farm to the ultimate consumer with all its implications and complications is very comprehensively and adequately described. I feel no hesitation whatsoever in congratulating the Marketing Department of the Government of India and the Provincial Governments and the Indian States for this very thorough survey which has brought to light a wealth of very useful information, which is indispensable to all those who want to plan the economic resources of this country. Along with the work of this comprehensive survey, the Marketing Adviser to the Government of India has also tried to draw certain conclusions and he makes certain recommendations. And it is here where the report absolutely fails us. After a careful reading of the whole report I am forced to the conclusion that the report entirely lacks any vigour and has miserably failed in making any foregoing recommendations, which should have been the main task of the compilers of this Report. The mere survey work, however comprehensive and admirable it may be, is only a mechanical work

which does not require much intelligence and foresight and could be quite well done by any graduate who is given the adequate training to do this sort of work. One expects much more than this from the Marketing Adviser to the Government of India. As a matter of fact in this important respect I am more than disappointed in this report, which not only lacks the vigour and courage to set the system of marketing in order, but in many respects, to say the least, it is very misleading. For instance, the Report states that, "In India there is perhaps a tendency to rely over much on Government beneficence." One is much surprised at the courage for making such a ridiculous statement in connection with help to the wheat growers, when in the same chapter we are told at some length the comprehensive Government measures that have been taken by several Governments in helping the growers of wheat to get higher prices than those prevailing in the outside markets. The U.S.A. Government spent millions of dollars through the Wheat Stabilistation Corporation in stabilising the prices of wheat at a higher level. In the United Kingdom the home of *laissez faire* and free trade, the Government guaranteed a fixed price of 10 shillings per cwt. while the marked price was only 4/6 per cwt.

Praising the laudable efforts of the Indian railways in reducing the freights on wheat *distained* for export, the Report further observes very complacently that there is apparently not much that can be done to encourage exports of wheat without injuring the interests of the cultivator. A very strange logic indeed which we mortals cannot understand. Anyway, the concession given by the railway authorities to the exporters of wheat is not of much value as the export of our wheat during the last decade has been negligible. On the other hand, the internal trade of wheat plays a very important part in the economy of the country and deserves every possible consideration at the hands of the railway authorities in this country. But what do we find? The policy followed by the railways is not only retrogressive but seriously injures not only the producers and exporters of wheat but also the country including the railways themselves. The year 1931 was very

critical for the agricultural industry. The price of wheat had fallen to absurdly low levels which did not cover even the bare cost of production. The apathy of the railway authorities aggravated the situation. Wheat was rotting in the Punjab and could not be sent to Calcutta owing to the railway freight policy. While on the other hand, huge quantities of wheat were imported in Calcutta from Australia. The freight per maund of wheat from Australia to Calcutta was 6 as. per maund, while the railway freight from Lyallpur to Calcutta was Re. 1-3-3 per maund. Requests and protests were made to the authorities of the North Western Railway and the Punjab Government respectively, but no immediate action was taken. While we were unable to distribute our own wheat in our own country, organised efforts were made by the various countries of the world to heavily subsidise the shipment of wheat to foreign markets. As already remarked, in the U.S.A. alone millions of dollars were spent by the Wheat Stabilisation Corporation to buy wheat from the farmers at much higher prices than could be possibly obtained in the markets of the world. What a contrast!

Certain critics may point out at this stage that it is not fair to compare the two rates between Australia and Calcutta, and Lyallpur and Calcutta, as the two rates belong to two different categories, the former being the sea freight and the latter being the railway freight. And it is admitted by all that the sea freight is much cheaper than the railway freight. The question of comparing the two rates arises only in case the two countries are following the policy of *laissez faire* and non-intervention by the State, and the forces of competition are left alone. But in this case the Australian wheat was dumped into the Indian market. The price of bread in Australia was four to five times higher than was justified by the conditions of free trade. The Australian consumers were being heavily taxed to subsidise the wheat growers. Under these circumstances, the policy of the Indian railways looks almost criminal when we compare the situation in India with other countries, frequent examples of which are given in the Report itself. By their stubborn selfish policy the railways were respon-

sible for prolonging the depression, especially when the railway stock was lying idle for lack of freight. But the railways preferred this self-imposed idleness than to lower their freights drastically in order to help the farmers which form the majority of population in this country. To my mind it would have been the duty of any National railways to carry the wheat even free to Calcutta at a time of such a serious depression, and to charge the losses to the general tax payers. This was the least and the most reasonable subsidy which in India could have been given to wheat growers.

The Report makes several other recommendations which in themselves are excellent but have been so often repeated in official and non-official literature, that these have almost become stale. For instance, the reduction and regulation of market charges is a matter of urgent attention on the parts of the local Governments if the growers are to receive better terms; the dissemination of market news to cultivators; the removal of the burden of the octroi duty which weighs very heavily on the producers, the total amount being $1\frac{1}{2}$ crores of rupees every year. The Report also deplores the lack of proper shelter and storage facilities in most of the markets. We know too well the financial condition of our municipalities. If they are made to improve their markets, they must have funds, and if we are going to remove the octroi duty how are the funds to be obtained unless some other adequate remedy is discovered. I suggest that the municipalities should be compelled by law to spend all the money received by octroi duty on agricultural products in regulating and improving their markets and in producing shelter and storage facilities. I fail to understand as to why the Report recommends, " the consideration of such measures as would lead to the cessation of payments in kind on account of harvest wages, etc.; and lead to the abandonment of a barter for a money economy in the village." In view of the terrible collapse of the money economy and its devastating effects during the last depression witnessed by almost all countries, one is more than bold to recommend such a step. It is a folly to suppose that all the modern things are good and all the old

practices of India are bad and evil. One important factor which saved the Indian farmer from utter collapse and ruin during the last great depression was the system of payments in kind which did not burden the farmer in face of rapidly falling prices. And it is the same system which helps the small man in the village and saves him from starvation at times of rising prices. Payments in kind are equitable both to the wage-earners and the employers to mitigate the effects of rising and falling prices. Knowing the heavy charges that are involved in the marketing of goods it seems hardly wise to recommend a measure whereby a farmer first sells his produce and bears all the extra costs of marketing his produce and then pays his labourer in cash who again has to buy almost the same commodity for his use at an enhanced price.

In its 450 pages, the Report makes no definite recommendation regarding the financing of wheat production which is an essential and integral part of marketing. It seems to me that the Report is excellent as the routine knowledge and factual data are concerned but absolutely lacks in vision and fails to make any recommendations which will materially help to solve the problem.

My Recommendations

The first and the foremost observation that I have to make is that the problem of marketing in India will not be solved on conventional lines. The problem requires foresight, courage and more than all the will to solve it. This can only be solved by a national government which is determined to solve the problem at all costs and is prepared to go to the very root of the evils to eradicate them. The problem has to be tackled thoroughly and in all its aspects. The first and the most important aspect of the problem is to finance the farmer during the period of his production. The financial resources of the Indian farmer are too scanty and beyond his means to adequately finance agricultural production, the period of which is usually longer than that of industrial production. The real difficulty of the problem is that so far no agency has done this work to any considerable extent except the village money-lender whose terms of

finance are too onerous, and it ends generally in making the peasant the serf of the money-lender. He ceases to produce for himself and begins to produce for the money-lender who usually combines the profession of money-lending with shop-keeping and trading. As long as the farmer is not saved from the clutches of a money-lender and his financial help is not replaced by the financial help of some more reliable and less onerous agency, no solution of the "marketing problem can be found. I do not believe in the deep-rooted conviction of most people that money-lender is indispensable and no agency can be found to take his place. The same thing used to be said in the Balkans fifty years ago where rural money-lender was considered as indispensable as he is considered now for India. But with the bold help of the State the problem has been fully solved and we do not hear of money-lenders in the old sense any more. The plea that India is such a vast country and what could be done in small countries cannot be done in this vast sub-continent is utter nonsense. In the first place the problem is a provincial one and it should not be impossible for the provincial governments to tackle the problem. No difficulties were unsurmountable even for the autocratic and highly centralised government of the pre-reform era to collect land revenue even from the smallest farmer, and there is no justification in withholding the hand of help to the man, on the welfare of whom the very existence of the State depends. Once this much is agreed upon that the provincial governments should do their best for the farmers, then the question of means can be considered. In my opinion the only adequate and sound solution to solve the problem of financing and marketing of agricultural products is through the establishing of a State Bank[1] in the provinces with branches in each small town and a chain of warehousing and marketing organisations. In this connection the question of funds will arise. As far as the establishing and the working of the State Banks is considered, there will not be any financial burden on the State. But as far as the warehousing and marketing

[1] For details, see my "*State Banks for India*". Macmillans, 1939.

societies are concerned, it will be essential to find funds for them.

Considering the important part which agriculture plays in the economy of this country, it has not received the financial help from the State compared with the high protection which some of our industries have been receiving. Once the Government abandons the policy of *laissez faire*, it becomes an injustice to help one industry and to neglect another, especially when the other is the most important one. The time has come when agriculture should receive its proper share of help and the State has got to find funds either by taxation or by borrowing to finance agriculture. The details of financing agriculture by State instead of by money-lender, I can work out if the main recommendation of State help is accepted.

After this stage of financing of production is completed, then comes the question of handling, storing, transporting, and marketing of produce. At present handling is mostly done by the money-lender, because he is the person who finances production. And he very often mishandles the produce as far as the interests of the grower is concerned. If my first recommendation is accepted the question of mishandling by the money-lender would not arise. The second step would be the storing of the produce till it is transported. I propose that in order to save the high costs of storing the produce in the central markets, it should be stored in the rural areas where the costs of handling and storing are less than the costs of the same services in the central markets. It will at once be remarked that there are no such storing facilities in the rural areas. My answer to this is that such facilities should be provided and a part of the cost should be met by the Reserve Bank from the profits realised by the issue of currency.

The warehouses in the rural areas should be used for two purposes: (1) for storing the produce which is awaiting transport or sale; and (2) for storing the produce of the farmer which he wants to store for his personal consumption, which he cannot safely and adequately store in his house. Incidentally through this system a very important problem of providing better seed and thereby standardising the quality of

wheat can be solved. When a farmer brings his produce for storage he should be asked about his seed requirements and that much produce with his permission should be taken by the marketing society and should be sold with the rest of the produce. In return, at the time of sowing, the society should provide the farmer with the better quality of seed. The money-lender does the same but with very different effects which are injurious to the interest of the farmer. He takes his produce at the time of harvest in repayment of old debts, a part of which is due to borrowing for purposes of seeds on which he charges 50 to 100 per cent interest, and provides him with a poor quality of seed later. Now the same work should be done by the marketing society with great benefit to the farmer.

The warehouses should be under the control of the Central Warehousing Societv and should be supervised by the Agricultural Credit Department of the Reserve Bank. The receipt of such a warehouse should be considered a negotiable instrument and should be freely discounted by the banks and ultimately, if need be, rediscounted by the Reserve Bank. The Reserve Bank Act also makes provision for this and it is high time that something should be done in this connection. Two more problems have to be considered. One I think could be tackled, easily and at once without any loss to the Government. That is, the system of collecting land revenue should be overhauled in such a way that the collection should not begin immediately after the harvest, as that leads to the glutting of the markets by forcing the farmers to sell their produce in order to pay the land revenue. The second and the most important question is to change the transport policy of the country in such a way that maximum concessions are extended to the transport of agricultural produce. Now that the internal trade of the country is far more important than the external trade, at least as far as wheat is concerned, the old railway policy should be modified to suit the changed conditions.

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Disinterring the Labour Theory of Value

(A note on Mr. Dobb's contentions regarding the requirements of a theory of value.)

1. An increasing perception of the limitations of equilibrium analysis seems to have lent plausibility to the hope of resurrecting in some refined form the labour theory of value. Among socialist writers this attempt assumes the form of an argument stating that the labour theory of value is able to answer many vital questions, to which the marginal theory does not, (and in their view could not,) offer any useful answers. Some such thesis, in effect, seems to underlie Mr. Dobb's erudite attempt to reconstruct a forlorn hope for the labour theory of value.[1] The various arguments offered in support of this thesis come under two broad categories,—those which seek to explain the inherent superiority of the labour theory, and those which find equally inherent drawbacks in the marginal theory, which preclude the possibility of its ever being in a position to give a complete idea of the phenomenon of value. The following note is merely an attempt to record impressions regarding, what appear to the present writer, to be inconsistencies or inadequate expositions in Mr. Dobb's arguments.

2. Mr. Dobb's preference for the labour theory of value rests on the grounds, (a) that a principle of value which merely expresses one value in terms of another is inadequate, (b) that keeping in view the type of statement that economic theory is expected to make, the determining relation which figures in the equational system should be capable of expression in quantitative terms which, however, is not possible on the basis of the marginal theory as it does not possess a 'value-constant,' (c) that such a 'constant' was discovered by the classical writers in a relationship of *cost* which explained exchange-ratios as governed by the quantities

[1] Maurice Dobb: *Political Economy and Capitalism*: (1937). Ch. 1.

of embodied labour, labour itself being conceived as the expenditure of a given quantum of human energy, and therefore as being objective in character, (d) that, in any case, a demand theory, in the last analysis would be untenable because it is only in terms of a cost theory that the concept of a 'surplus' can have any meaning, and (e) finally, that it is necessary to recognise human labour as cost in a unique sense and endow it with a primary significance in economic analysis.

Concerning the first two arguments mentioned above, it must be stated in further explanation, (as I understand them,) that they charge the marginal theory with offering an explanation of commodity values in terms of subjective valuations, and the factor values in terms of the commodity values and, therefore, assert that it does not indeed explain the problem of distribution which is an essential, indeed major, part of the practical enquiry.[2] This argument which seems to offer a *tu quoque* reply to the familiar illustration of circular reasoning involved in the labour theory of value, seems to overlook the cardinal fact that in reality the factors do depend for their valuation on the productivity of their marginal units; and, therefore, any other explanation of value not based on the recognition of this relation would depart from reality. For this reason primacy cannot be accorded to the problem of distribution over that of production without bringing about a discord with the reality of the economic process. The problem of distribution derives its semblance to reality by being related to the productivity valuation, which, to repeat, is a mere description of the actual process at work, and which itself cannot ultimately be dissociated from its relations with the buyer's preferences. That the results of distribution so effected offend our sense of social harmony may be indicative of a great degree of social sympathy. But unless an *explanation* were mistaken for a *justification* (an error, undeniably, of an insidious character and one into which not a few unwary economists have slipped) it cannot be denied that the marginal theory does offer a clearer *explanation* of the process of distribution than

[2]Dobb: *Ibid*: P. 11.

the one (or is it the many?) offered by classical political economy. At least, it would appear that the correctness or otherwise of this theory cannot be called in question by contending that it has not offered a *solution* to the problem of distribution.

Similarly, the argument that the crucial 'value-constant,' supposed to be absent in the marginal theory, was supplied in the classical theory in the concept of *cost*, also appears to be vulnerable. Explaining this argument Mr. Dobb writes: "The exchange value of a commodity was defined in the purely relative sense of the amount of other commodities for which it was customarily exchanged. But a determinate solution for this system of exchange-ratios was sought in the principle that these ratios were governed ultimately by the quantity of labour required (in a given state of society and technique) to produce the commodities in question. . . . Prior to Ricardo this principle was not enunciated in any complete or clear-cut form. Frequently, indeed, it was formulated obscurely, and even ambiguously, Adam Smith having referred both to the *amount* of labour and also the value of labour used in production. As used by Ricardo and Marx, the conception of labour was an objective one; labour being conceived as the expenditure of a given quantum of human energy, even though it was later to be translated into subjective terms as a mental 'sacrifice' or psychic 'pain' involved in work. Viewed objectively in this way, the determining relation was a technical one and not a value relation. In any given technical situation it would be a given factor synonimous with the degree of labour productivity and independent of the *value* of labour-power."[3]

This argument appears to be weak at several points. In regard to the 'value-constant' that Marx is said to have discovered in the quantity of labour, whatever theoretical attractiveness it may possess, it is not shown how it could be of any practical use. That exchange-ratio is determined by "the amount of other commodities for which it was customarily exchanged" seems to be a pitfall as customary

[3]Dobb: *Ibid*: P. 12 et seq.

exchange value is rare, and there is need for a principle which explains the changing as distinguished from a constant custom-governed value. Further, we do not even know how to proceed from the assumption of *a* given state of society and technique to *any* given state of society, and whether the concept of 'quantity' of labour would continue to be tenable even under the influence of change. Nor does it seem to be clear that this was the prevailing view in the whole range of classical writing. As Mr. Dobb himself points out, Adam Smith referred to both the *amount* of labour and the *value* of labour, and there is no reason to suppose (as is done by Mr. Dobb) that this is merely an obscurity or ambiguity of reference. It seems impossible to find sanctions for Marxian value in Adam Smith. As Bukharin wrote, Marx's "doctrine of value must be sharply distinguished from that of the classical economists, particularly Adam Smith."[4] Adam Smith's notions on value were more in line with the present theory of value and against the objective drift.[5] Even assuming that the exchange ratios are explained by the embodied labour quantities, when it is a question of finding a common denominator for different types of labour with their innumerable qualitative differences, the valuation of productivities alone seems to offer any workable, if not the only justifiable, criterion of comparison. For this reason, if for nothlng else, Mr. Dobb's contention that the relation determining value is purely technical, becomes untenable as in the last resort the value considerations cannot be eschewed in the matter of comparing qualitative differences in labour 'quantities.' And this logically leads to the conclusion that a concept of productivity distinguished from its value has, for economic purposes at any rate, no significance. All this seems inescapable. Mr. Dobb himself writes elsewhere, that the "principle of identity of value-ratios with labour-ratios rested on conditions which defined the nature of the dominant tendencies in an exchange society." Here it appears to us that Mr. Dobb grants the existence of a distinc-

[4] Bukharin: *Economic Theory of the Leisure Class*: P. 37.

[5] On this point see Robbins: *Nature and Significance*: pp. 68-9; and Knight: *Ethics of Competition*: pp. 152-3.

tion between value-ratios and labour-ratios. In that case it is clear, that value can be something different from the labour content and move independently of it. Further, he writes, that "competition would ensure that labour was distributed between the various lines of production in such a way that these ratios were equal." If, thus, it is possible to conceive of an *adjustment* tending to an equality between labour and value-ratios, then labour-ratios cease to be the determinants of exchange relations as they are themselves *adjusted* by competition.

If there is validity in these strictures, the idea that the concept of cost as found in the labour theory of value enables a measurement of 'surplus' will come under doubt, as such embodied labour would be neither measurable, nor comparable, nor is it the determinant of exchange relations that it is supposed to be. But there seems to be even a more fundamental objection to this idea of cost and surplus. This concept of surplus in the classical writings seems to rest on the confusion between cost to a nation or individual of its income as a whole and the 'cost' of a particular unit of a commodity which determines its price.[6] The fact that labour is paid in inverse rather than direct ratio to 'pain' is itself an indication that the market takes no better cognisance of the services of labour except in the light of relative attractions of competing uses and the very concept of embodied cost becomes irrelevant to the main value problem.

It is this, perhaps, which leads Mr. Dobb to insist on a treatment of human labour as cost in a unique sense. According to him this is a "practical question for judgment not for logic to decide."[7] While pleading ignorance of Mr. Dobb's view of the distinction between a question for judgment and a question of logic, it seems necessary to say that a judgment not based on logic is likely to stand vitiated by passions and prejudices and will import valuations not amenable to any uniformity of treatment. Conclusions based on judgments will necessarily lack the compelling power of reason; and in nine cases out of ten they may possess no

[6] Knight: *Ethics of Competition*: p. 173, Ft. note.

[7] Dobb: *Ibid*: p. 20.

relation to reality. It will be tantamount to taking leave of the scientific method—the only method available for asserting truth rather than guessing or presuming it. In any case it is one thing to assert that the services rendered by labour as a factor of production should be treated in a unique sense; and quite a different thing to see the market value it as such. Even in the absence of market valuations it is doubtful if the planning agencies could ignore the comparison of the productive significance of the marginal units of labour, and the marginal productivities of the other factors, reverting in effect, to the market process. Even if the special treatment of labour productivity as something unique is to be recognised for social reasons, and pursued as an end in itself, it would be necessary to know the cost from an economic point of view, of giving up the alternative proceedure of not treating labour in any special way. Indeed, this seems to be the weakest link in Mr. Dobb's chain of reasoning for the labour theory of value.

3. Mr. Dobb's attempts to show up the merits of the labour theory by contrast with the limitations of the marginal theory are no more convincing. His main charges against the marginal theory are (a) that this theory, inspite of all its formal elegance, being devoid of a quantity which is itself not a value, is reduced to being a mere formal technique that can make realistic prognosis in certain cases treated in isolation, but is impotent to pronounce judgments with respect to the 'macroscopic' phenomena of economic society, (b) that having regard to the practical question which one requires to answer a law of value need not be capable of achieving the highest degree of generality, but should only be able to sustain a type of forecast that may be felt necessary in practice, (c) that the assumptions relating to an abstract individual as the subject of a demand schedule, which ignore the influences of the complex of institutions and social relations, reduce the findings of this theory to falsity, and (d) that the affirmations of economic theory in regard to the automatic adjustments and the rule of rationality on the market are falsified by the fact that decisions are taken in blindness to other decisions, and since the corrective of resulting price movements usually occurs only after a time

lag, this will give rise to magnification of the results of such faulty decisions and through it to the devastating fluctuations.

Mr. Dobb's objections to the non-quantitative character of the value equations, it appears to us, seem to overlook certain other considerations which are essential to a proper judgment in regard to the value question. In the first place the nature of the causal relation subsisting between the elements which are to be treated as variables and those to be treated as constants in economics seems to be of a type different from what obtains in the treatment of physical elements and quantities, the character of mutual adjustment being more general as between the various adapting factors in economic life (*e.g.*, as between cost and price) so that the fascination for constructing something corresponding to a 'gravitational-constant' in economic theory has its limitations; and purely relational statements have their due significance. Besides this, the obsession for a quantitative rendering seems to be a vestige of the criticism directed against the hedonist concept of utility as a quantitative, measurable, fact, finding expression in price, and seems to overlook the true concept of utility as 'power over conduct,' as being essentially qualitative and possessing not so much a dimension as rate or intensity.[8] If this be so, the necessity for a 'quantitative' rendering of utility as an ultimate constant becomes unnecessary to an exploration of the equivalent supply and demand quantities, the point of equilibrium being taken to represent such equivalence between two unknowns. If we get over the price offers and price demands, and present the situation in barter terms, the exchange relations could be viewed as representing equilibrium at the point of 'quantitative' equality between two unknowns. It may be true that this procedure is valid with due limitations, at any rate, in its application to the larger, general economic problem, or what has been styled by Mr. Dobb as the 'macroscopic' problem; and the necessary modifications in its application to practice, only development along scientific lines would reveal. But to be

[8] On the qualitative character of utility, see: Knight: *Risk, Uncertainty and Profit*: P. 61.

concerned chiefly with the ' macroscopic ' issues and treat the ' microscopic ' as very secondary as Ricardo did (as Mr. Dobb tells us)—and as even Marx did—seems to be the reason why their forecasts had found themselves confronted by such splendid contradictions in the actual movement of history.

Mr. Dobb's other charges against the marginal theory appear to be no more conclusive. The search for laws of wide degree of generality has, it is alleged, led to an abstraction of phenomena of exchange from the productive relations and the property and class institutions of which they are an expression. That such an abstraction has taken place is, no doubt, a fact. And it is gratifying that Mr. Dobb grants that something of the real world still lingers even in this tenuous abstraction. His charge that they can hardly hold anything imperative for the problems of the actual world may not be denied. But none of these limitations of the marginal theory could make a case *for* a labour theory of value. The fact that our present knowledge of the phenomena is too abstract to be applied in practice cannot prove the falsity of the method itself. Nor does it appear very convincing that if only we concentrate on the ' macroscopic ' problems and treat the ' microscopic ' as of secondary importance, we shall be achieving better solutions of the purposes on hand. It may be the limitation in the marginal theory that it concentrates only on the 'microscopic' issues, but this can be no argument against the instruments of analysis it has forged. Nor is there reason to believe that a similar futility will not attend the findings of any search which swings to the other extreme and offers priority to the broader issues. Hope, however, points to the superiority of a method that starts with simple postulates of universal validity and builds up a body of generalisation transforming in a gradual scientific process the 'microscopic' analysis into the 'macroscopic.' At least, enough argument has not been advanced to prove that if we give up the search for economic laws, but merely build up *an* economic theory of capitalist production it will enable us to tackle, with success the practical problem. So long as it remains an assertion unaccompanied by convincing argument it can command no

consideration. Similar in character is the general criticism that demand is created through propaganda and that the ignorance of the *entrepreneur* of the expectations of his compeers falsifies the conclusions regarding the automatic adjustments of resources through the market operations. While not denying the fact of such influences being operative, they could not be held to invalidate the fundamental tendency. Aberrations may be real; but, like exceptions, they prove the rule. That persistence along lines of proved efficacy will not enable increasing perfection in prognoses is a cynicism that as yet finds no warrant; even if such cynicism, were it to be found correct, will offer no argument *in favour* of the labour theory. Incidentally, there is one temptation to ask, whether in propagating the idea that the cumulative effect of mistaken decisions is the explanation of the 'devastating fluctuations,' the socialists who accept this are not giving up the whole of the Marxian philosophy regarding the economic crises as originated by the appropriation of surplus-value?

4. In conclusion it may be necessary to clear up that none of this criticism need imply that the marginal theory offers the most reliable type of economic wisdom. It is not the critics of this theory but some of its best exponents that have readily confessed to the existence of elements of paradox and unrealism in it.[9] It is not denied that the theory is still incomplete in many respects, particularly those that concern the practical aspects. Its limitations in the dynamic aspects are no less real. And it may be even *possible* that the whole body of equilibrium theory itself may be proved to be false and consigned to the limbo of experimental waste. But all the 'falsehoods' it may embody may yet offer the only reliable guides in the search for truth. Impatience with its 'tenuous abstractions' and over its 'incompetence' to play the economic oracle is not enough justification to believe that the alternative oracles are not delivering themselves with too much of 'judgment' and too little logic.

P. S. NARAYAN PRASAD

[9] On this see Knight; *Ethics of Competition*; p. 159—60.

Indebtedness of the Mill Worker

A very welcome feature of the present century is the almost universal interest and enthusiasm shown in the cause of Labour. Be it a Democracy or a Dictatorship, the maximum possible attention is being devoted to the labourers and their welfare. Hours of work have been reduced; wages have been increased; and amenities for recreation have been created. Even India, which is ever the last in the race of progress, has not escaped this universal wave of sympathy for the labourers. Several provincial governments have already on hand many useful plans for the betterment of the labour conditions. Yet the condition of the Industrial labourer today in India, to say the least, is appalling. Rickety limbs, contracted chests, hacking coughs and hollow cheeks make up a mill-worker. It is often said that the factory system has reduced the human species to the level of mere automatons, but the situation in India is worse than that. The machines have at least the certainty of oil and coal at regular intervals. The creak of the machine seems to be more powerful than the shriek of the millions. The reason is not far to seek. The machine breaks—but the labourer only bends, with the consequence that the heaviest possible load is thrown on his back. What is the reason for this miserable condition of the labourer? Several factors have contributed to reduce Labour to this situation, not the least important of which is his huge indebtedness.

Much has been said about rural indebtedness, but the problem of urban indebtedness is even more acute. It is a huge burden which demoralizes the labourer, undermines his physique, deadens his mind, weakens his ambition and makes life disgusting. The Whitley Commission observed that "two-thirds of the factory workers employed in India are in heavy debt.". In the majority of cases the amount of debt exceeds three months' wages and is often far in excess of this amount. Even a very modest estimate would carry the total indebtedness to Rs. 10 crores, while in a single city like Madura, where there are 12,000 labourers, the total debt comes to 5·5 lakhs. This big debt is becom-

ing bigger every day. It is no wonder. The rate of interest ranges from 75 to 200 per cent. Mr. Ahmed Mukhtar of the Annamalai University observed in his evidence before the Royal Commission that in two mills at Amritsar the rate per cent. was as high as 79 and sometimes the interest charged was one anna per rupee per week. Almost invariably, says Mr. Hoyland, "the Indian Mill worker stands in a relationship which amounts to little short of slavery towards the money-lender—the rate of interest is not unusually two annas in the rupee per mensem, which means that a loan of Rs. 60 (if none is repaid and very frequently the cost of living in the city is so high that none can be repaid) becomes in 5 years a debt of about Rs. 70,000." Mr. S. R. Varadarajulu Naidu, the representative of the Madura Labour Union, puts the rate as high as 75 to 150 per cent. on short-term loans. The Bombay Labour Office, in its Report on Working Class Budgets in Ahmedabad, observes that the amount of debt varies from a few rupees to many times the monthly income. The money is borrowed at heavy rates of interests, which in the majority of cases vary from 12 to 24 per cent. But higher rates of interest are not uncommon and, in fact, in one case the rate of interest was as high as 225 per cent. The Indian Jute Mills Association in its evidence before the Bengal Banking Enquiry Committee, mentions 325 per cent as the highest rate.

The above figures are enough to show the magnitude of the problem. Steeped in a greater amount of per-capita debt than his rural comrade, paying a larger rate of interest, purchasing commodities at higher prices, and living in more insanitary places, the urban worker's claims on our attention are the more immediate. Often nothing in his home can he call his own; jewels, vessels, *saris*, in fact everything of howsoever little value is mortgaged. The indifference of the employer, the extravagance of the employee and the avarice of the money-lender have cumulatively brought about this situation. The root cause is low wages. While wages are ridiculously low, the family is abnormally large. The consequence is that even to meet the elementary needs of himself and his family, the labourer has to run into debt. The Whitley Commission has examined the wages in

all the Provinces and finds that, although no two mills agree in the rate, there is certainly uniformity in so far as lowness of wage is concerned. Wages are low in the Madras Presidency, particularly in the Coimbatore and Madura Mills. People who speak of the inefficiency of the Indian labourer do not, however, realise that for his wages he produces far more than what his American and English brother does. Dr. Nair argued rightly in 1908 that "if one Lancashire operative is equal to 2.67 Madras operative, then since the average monthly wage of a Lancashire operative is about Rs. 60 (£4) while that of a Madras operative is only Rs. 15 (£1), it is clear, for the same money the Indian Mill-owner gets nearly double the work that an English Mill-owner does." Still others think that higher wage to an Indian labourer would tend to make him extravagant; that is certainly a wrong if not a mischievous assumption. Professor Pigou says: "It is true that at any given moment the taste and temperament of persons who have long been poor are more or less adjusted to their environment and that a sudden and sharp rise of income is likely to be followed by a good deal of foolish expenditure, which involves little or no addition to economic welfare. If, however, the higher income is maintained for any length of time, this phase will pass, whereas if the increase is gradual, ... the period of foolishness need not occur at all. In any case, to contend that the folly of poor persons is so great that the rise of income among them would not promote economic welfare in any degree, is to press paradox beyond the point up to which discussion can reasonably be called upon to follow."

The difficulty of the labourer is aggravated by the fact that he has no security as regards his job. He always stands in dread of dismissal. His entry into the mill itself depends upon the amount he is able to pay to the Jobber or *Maistry* as he is called. This is an important cause of labour indebtedness. In some of the mills it is practically impossible for a worker to enter the mill unless he can pay something to the *Maistry*. This amount ranges from Rs. 15 to 60, in addition to the toll taken in the form of services. Next only in importance to the Jobber is the Time-keeper,

who extracts a fee for marking attendance properly. There is again the practice of the labourer being fined. "It appears," observes the Whitley Commission, "that fining is a fairly general practice in perennial factories and on Railways." When the Labour Office made its enquiries in 1926, it found that in Ahmedabad Textile mills, the worker lost in fine no less than 10 per cent of his total wages. In some mills, payment of fines has become a part and parcel of the worker's monthly budget. It has to be remembered that numerous deductions of other kinds are also made by some employers. Deductions are made for medical attendance, education, readingrooms, advance of wages, charities and also for some religious purposes selected by the employer. A common practice in cotton textile mills is the handing over to the weaver of cloth from his own loom spoilt in the course of manufacture, and deduction is made from his wages . . . . . . at the whole-sale selling price. Another practice followed in some mills is the deduction of two days' pay for one day's absence. Delay in payment of salaries or wages contributes not a little to the worker's indebtedness. The shopkeeper is a miniature money-lender. Not only does he refuse to sell commodities after the due date is passed, but he begins to charge interest on the old dues. The labourer is forced to borrow. The Whitley Commission refer to cases where the salary of the previous month was paid in the last week of the next.

The labourer himself is in no small measure responsible for his tragic situation. By his proverbial extravagence at marriages and funerals, by constant intemperance and indifference to rules of health, he digs his own grave. A fair percentage of the labourer's income goes for drink, and on the complete destruction of this habit depends his moral and material salvation. Labourers who live in metropolitan areas are divorced to some extent from village life and so from village customs and superstitions. It should be easier for them to spend smaller amounts on funerals and marriages for they have not to stand the odium of their rural relatives. But in India a purely industrial class does not exist. Every urban worker is fundamentally a villager, and often while he lacks the amenities of village life, he has

responsibilities springing from his connection with it. Every festival carries him to his village and he has expenses there. Thus the indebtedness of the labourers in Madura, Tuticorin, Ambasamudram and such places is greater than it is in Madras. Besides this, the house-rent in these urban areas is very heavy. It ranges, in the places mentioned from Re. 1 to Rs. 4 for a single dungeon, miscalled a room. The payment of rent becomes more oppressive when his wages get reduced or he is suspended. The money-lender, by his alertness and readiness to lend, is also a cause of the labourer's indebtedness. But for him 50 per cent of the expenditure now incurred will not be incurred. Add to this the fact that the shop-keeper is ever ready to give commodities on loan only to catch him later on. It is often supposed that money-lenders are a distinct class by themselves. It is not always so. In labour circles everyone, male or female, becomes a mushroom money-lender, whenever he or she has something to spare, and the interest charged is certainly oppressive. Thus there is no single pill to cure all the diseases arising from indebtedness.

It is strange that people should think of co-operation in India, only in connection with the Rural Welfare movement. The principles of co-operative credit have made little progress among the mass of workers in factories and mines. It is perhaps due to the non-existence of a distinct Labour class. Most of the industrial labourers, as already observed, are seasonal workers. Their constant mobility, combined with lack of organization, stands as a serious obstacle to the spread of the movement among the urban labourers. The Whitley Commission has observed that only where there is a settled Labour force, has co-operation a chance of succeeding. The progress made by co-operative societies in those areas where they exist is splendid. The Railways have made excellent use of co-operation. The Jackson Co-operative Credit Society of the B.B. and C.I. Railway issued loans in the five years 1924-1929 amounting to one and one-third crores. The S.I. Railway Co-operative Stores is doing good work. But among the labourers, co-operation can succeed only after they have formed themselves into Unions on Trade Union lines. Propaganda by the Presidents and Vice-Presi-

dents of these Unions will go a long way in spreading the movement. A Co-operative Store in every mill area would be of greater immediate help to de labourers than Co-operative Credit Societies. "Debt Redemption Societies," the formation of which is recommended by the Report, would certainly be of great help. Debt Conciliation Committees are recommended by the Banking Enquiry Committee, because much may be done by compromises.

How far the Government can help it is difficult to say. The Usurious Loans Act of 1918 still remains a dead letter. To a large extent the failure of legistation is due to a false notion regarding the sanctity of contract The objection based on the sanctity of contract may have been genuine in the past, but to-day it is difficult to regard it as more than an excuse. To talk of sancitity in connection with a blood-sucking contract made between a fleecing money-lender and an illiterate industrial worker is a grave misuse of a good word. There is also the difficulty of devising provisions which do not lend themselves to evasion by the money-lenders.

Legislation within certain limits has certainly great advantage. The fact that the provisions of the law are capable of being evaded by fraudulent means should not deter the Legislature from enacting a just and necessary measure for the protection of the simple and the ignorant. One important cause of the indebtedness of the labourer is the credit he has. Credit in the sense of borrowing capacity is his curse. As matters stand at present, the worker can borrow with comparative ease sums which he has little prospect of being able to repay. The Whitley Commission therefore recommend that salaries and wages up to Rs. 100 should not be liable to attachment. Although this figure is rather high, one cannot dispute the utility of the suggestion. The wage being the labourer's only security, it would be risky to the money-lender to advance money if he knows he cannot attach the salary. The Commission has also hinted at the injustice of imprisonment for debt. Such legislation would certainly help, and the credit of the labourer would be reduced all the more if his provident fund is also made free from attachment. Loitering within the precincts or

near or within sight of any mill-gate by a money-lender and his men to catch the wage-earner on the date of payment should not be tolerated by the employers, and the State would be justified in making it an offence. Legislation can also help a great deal by forcing upon employers prompt payment of wages, proper housing of the labourers, and the payment of sickness and unemployment benefits. Withholding salaries and suspension without notice should also be checked.

The Whitley Commission has recommended a new procedure for the liquidation of unsecured debts. "We contemplate," they write, "that on the presentation of an application by a workman giving a statement of his debts and assets, the court should issue a notice to the creditors and should thereafter in a summary enquiry estimate the workman's assets, his probable earnings and reasonable expenditure for the maintenance of himself and his family during the ensuing two years. The Court, having assessed these sums, would issue a decree based on the difference between the two." The Commission is, however, anxious that this law should not be confused with insolvency legislation. For, in insolvency proceedings, there is an inevitable tendency on the part of the court to regard itself as charged primarily with the duty of assisting the creditors and of checking fraud on the part of petitioners. In the case of loans which are obviously beyond the capacity of the labourer to repay, it is not unfair to regard the creditor as the person ordinarily to blame. The Commission has therefore recommended the constitution of separate Courts to go into this question.

Legislation and co-operation apart, much may be done by the employers. Unless there is a distinct change in the attitude of the employers towards the labourers, the latter's problems can never be satisfactorily solved. Also educated young men studying in the Colleges of Industrial centres should be compelled to do some kind of social work among the labourers every day. Each student can at least convert one illiterate into a literate. Our labourers are so appallingly ignorant that they are not even able to see a clock so much so that it is always open to an employer to push back the hands of the clock.

In short, in spite of what has been said, much remains to be done in the cause of the labourers in India. Many concerns unfortunately do not come under the Factory Acts as it is at present worded. In coffee hotels in India, children under 12 are being made to work from 7 A.M. to 12 P.M. In the city of Madura alone, I know that there are as many as 500 children who are so employed. Again in the city of Belgaum, in a single coffee club I know of, there are as many as 6 children so employed. "Besides," says Mr. Gangulee, "many industrial concerns, employing about ten million workers, do not come under the existing factory legislation; and here one discovers a most disgraceful spectacle of inhuman treatment of defenceless workers. I shall cite one instance of this treatment. In the carpet factories in Amritsar (Punjab) the majority of the workers are children between the ages of nine and fourteen, who are made to work on the looms through an eleven-hour day for 2½d. The factory-owners claim no responsibility in the matter of labour and wages, and shelter themselves under the contract they have with the master-weavers. But that is not all. I reproduce a document discovered by a member of the Whitley Commission during a visit to a carpet factory in Amritsar. The document runs as follows:

"I, Booter, son of Chakli, Chowkidar of Amritsar, owe Rs.57 odd, of which half is Rs.28 5a. which I have borrowed from Booty weaver in advance. I agree that my grandsons N and F should be handed over for the purpose of carpet-weaving. N is to get Rs. 9 per month, and F is to get Rs. 7 per month. I will take the wages monthly. I will not break this agreement. If I break this agreement I will return all the money I have borrowed to the man who has lent it to me."

If the difficulties of the labourers are not immediately attended to, I am afraid, the situation in India would become intolerable, and law and order would come to a stand-still. I have no doubt the labourers would be more than satisfied if only the employers would recognise the following demands of the Labourer:—

(1) "I am a human being and not a mere soulless machine.

(2) I want a hygienic house to live in.

(3) I want my children to be educated free.

(4) I want to be a skilled worker.

(5) I want to be saved frm the money-lender's clutches.

(6) I want to be protected from the "politics" of the priest.

(7) I want the abolition of drink and drug shops.

(8) I want the eradication of brothels, gambling dens, and the exclusion of sensational cinema films.

(9) I want a guaranteed subsistence allowance which will keep me above the itch of corruption, material as well as moral.

(10) I want sufficient leisure for self-cultivation and self-realisation.

(11) In short, I want my well-being to be assured by beneficent legislation, for otherwise—employers will not ameliorate my lot."[1]

Belgaum. K. S. SRIKANTAN

Seasonal Variation of Births

Though we know well that plants, trees, birds, animals and human beings living in a state of nature conceive more easily in healthy periods of adequate and easy supply of food than in other periods of the year, population studies contain meagre information about the seasonal variations of births and their significance. There are discussions on the

[1] *The Indian Labourer's Charter.*

causes of variations in the annual figures of births. Such discussions take into account rare incidents such as country-wide famines and epidemics and ignore the frequent environmental changes which occur from month to month. These frequent changes are too important to be ignored when studying the most pressing problem of the growth of population in the near future. In this article, I have attempted to trace and to interpret the relation between seasons and reproduction of the population in the British Districts of the Bombay presidency excluding Sind.

The presidency, but not Bombay city, is taken up for study, because the former is more often a unit of population study than the latter. In the case of the city, migration of pregnant females is quite negligible and the incomes of a large majority of persons (they are agriculturists) depends mostly upon variations in temperature and rainfall. As regards city, changes in the number of pregnant females are brought about from time to time on account of many females of neighbouring as well as distant places entering the city to receive treatment in efficient maternity homes. The exit of many pregnant females who are unable to meet the heavy expenditure towards confinement in city deserves consideration. Moreover, the incomes of city people who follow different occupations are influenced more by provincial, interprovincial, and international conditions of agriculture, industry, trade and so on, than by seasons. We have also selected for study the monthly variations in births in addition to variations in annual figures. In my article[1] on the "Nature of the growth of population in the British Districts of the Bombay Presidency," I have shown how failure of seasons in 1897 and 1899, resulted in a remarkable fall in the number of births in 1898 and 1900, and how later on the restoration of normal seasons unfailingly had large numbers of births. But the effects of monthly changes in seasons on births could not be traced clearly, because the year is a long period. The present study of monthly figures confirms my study of annual figures.

[1] *Journal of the University of Bombay*, January, 1938.

TABLE I

Births in the British Districts of the Bombay Presidency proper

(1) Year	(2) Jan.	(3) Feb.	(4) March	(5) April	(6) May	(7) June	(8) July	(9) Aug.	(10) Sept.	(11) Oct.	(12 Nov.	(13) Dec.	(14) Total.
1925	42,143	*38,082*	44,776	45,510	48,177	49,767	55,438	*57 577*	56,436	54,252	52,194	52,920	597,272
1926	49,207	*48,154*	*60,227*	54,688	52,933	53,689	55,404	54,910	52,507	51,497	49.387	48,283	630,886
1927	45,018	*39,116*	44,080	47,128	50,209	53,836	57.897	*60.907*	60,215	59,874	'57,779	55,003	631,092
1928	52,253	*49,922*	55,957	51,566	54,105	53,898	56,090	56,020	56,859	*58.483*	54,169	52,397	651,719
1929	48,660	*46,141*	54,122	54,175	57,418	57,399	*58.436*	57,166	55,149	57,562	54,541	52.926	653,695
1930	50,358	*46,782*	56,336	54,638	54,645	53,487	55,767	*57.037*	55,374	56,428	53,918	53,199	647,969
1931	52,066	*48,565*	56,768	56,074	59,292	58,438	61.354	62.997	62,127	*64,786*	59,141	56,702	698,310
1932	50,393	*45,662*	51,764	53,734	54,844	57,551	61,003	67,294	*68,003*	67,156	65,245	62,292	704,941
1933	57,439	*51,041*	61,020	57,326	56.860	54,699	58,290	64,394	64,557	*66,154*	63,162	61,001	715,944
1934	57,563	*52,451*	59,382	55,736	56,037	53,867	60,657	*65,317*	62,191	63,084	60,012	58,495	704,792
1935	55,986	*53,845*	63,033	57,560	55,265	56,893	63,346	*67.180*	66,756	65,700	62,048	60,534	728,146
1936	57,375	*54,997*	60,318	57,066	60,701	61,908	*67,567*	66,146	65,874	66,162	62,944	61,273	742,331
1937	56,457	*49,986*	59,597	57,080	57,487	58,178	64,530	*67,934*	65,474	67,369	62.355	63,029	729,476

* Figures kindly supplied by the Director of Public Health, Government of Bombay.

The accuracy of data in Table I does not need much comment, because everyone knows that many births escape registration. In the absence of reliable information, we can say that the ratio of the births omitted to actual births is almost constant in every month. Some of the births which have taken place on a particular day are recorded as births of some later date. The delay extends from days to weeks. Consequently, some births in the last week of a month happen to be recorded as births in the first week or second week of the next month. The extent of this discrepancy appears to be constant in all months.

In the case of the Bombay Presidency the monthly number of births did not increase from time to time steadily. If we study the data vertically, the movement of numbers is not smooth. These unsteady movements resulted in the unsteady movement of the annual number of births. But in every year in February the number of births was less than that in January. It was also the lowest figure of all monthly figures of the same year. In almost all the years, the numbers rose steadily from February for some months and then fell steadily till February in the succeeding year. The figures have a wave movement with the lowest level in February and the highest level in August or thereabout. The problem that arises now is, Why is it that February is always the month of the lowest number of births and August or thereabout the period of highest number of births? Human pregnancy being of slightly more than nine months' duration, May is the month of the lowest number of conceptions and November the month of the largest number of conceptions. Now we shall consider the probable causes of this phenomenon.

According to the latest Census *viz.*, of 1931, about 62% of the workers in this presidency were engaged in agricultural occupations which were mainly seasonal. (Besides this, some lakhs of artisans and labours in cottage industries have employment in certain seasons.) The principal crops, jowari, rice, bajri, ragi, maize, groundnut, cotton, and sugarcane are harvested in November and thereabout. Summer rice and late cotton are harvested in May, while late wheat and late sugarcane are harvested in April. Early wheat,

late jowar, gram, late til, late cotton, and early tobacco are harvested in January and February. In November and thereabout, most of the crops are harvested and the agriculturists have then enough to eat, dress, marry and lead a complete life. This season is cold and healthy. Most probably, as the result of these factors we have a maximum number of conceptions in November and a maximum number of births in the August of the succeeding year. Only a few crops which are not raised extensively are harvested in May. Then heat is very oppressive. This may be the reason for the lowest number of conceptions in May and the lowest number of births in the February of the succeeding year. The following table of births in Bombay city confirms my interpretation.

TABLE II

Births in Bombay City

(1) Year	(2) Jan.	(3) Feb.	(4) March	(5) April	(6) May	(7) June	(8) July	(9) Aug.	(10) Sept.	(11) Oct.	(12) Nov.	(13) Dec.	(14) Total
1933	2,751	*2,137*	2,172	2,189	2,254	2,260	2,397	2,413	2,671	3,047	3,255	*3,380*	30,926
1934	3,099	2,512	2,629	2,542	2,481	*2,387*	2,571	2,624	2,812	3,140	3,285	*3,642*	33,724
1935	3,012	2,597	2,615	2,583	2,577	*2,375*	2,757	2,638	2,932	3,292	3,414	*3,636*	34,428
1936	3,170	2,817	2,824	2,611	*2,581*	2,658	2,856	2,852	3,020	3,208	3,535	*3,771*	35,905
1937	3,466	*2,567*	2,786	2,648	2,722	2,569	2,686	2,686	2,844	3,406	3,415	*3,660*	35,455
1938	3,200	2,764	2,921	2,793	2,801	*2,616*	2,799	2,865	3,183	3,373	3,436	*3,997*	36,748

* Figures kindly supplied by the Health Officer, Bombay Municipality.

The data are as accurate as those of the presidency. The highest monthly figure has been always in December and the lowest monthly figure most often in June. The second half of every year shows a gradual rise in the number of births. This is quite contrary to what we have noticed in the case of the presidency. Similar to the presidency trends, the Bombay city figures of January are lower than those of the preceding December and those of February lower than those of the preceding January. Another point of similarity is the increase in March figures over those of February. From March to June we notice a tendency towards a steady fall.

It is very difficult to explain the slump in June and the pitch in December, because the pregnant female population in the city is frequently moving. The steady fall from December to February confirms that for the whole presidency February is the period of the lowest number of births.

The above data make us think that when the presidency becomes highly industrialised, incomes become less affected by seasons and people become more intelligent than at present, births will move steadily and estimates of future population can be made more satisfactorily than at present. For the present, changes in annual figures of births can be explained easily by the variations in the seasons.

G. RAGHAVA RAO.

The Unit of Farming and Credit

In any enterprise the size of the business is an important factor in the cost of production. With economic progress there has been a tendency, until very lately, for the business unit to increase in size, thereby gaining the economies of large-scale production. In order properly to understand the nature of agricultural problems, it is necessary that we should examine the economic basis of small farming, which is the predominant unit of production in the old coun-

tries of the world, especially the Eastern European countries. The average size of farms in most Eastern European countries (excluding Yugoslavia, Greece and Turkey, for which figures are not available) is about 6·33 hectares.[1] The average for the Western European countries (excluding Spain and Portugal) taken as a whole is 8·48 hectares.

In order to increase the farmer's standard of living there are two alternatives open to us:

1. The average size of the farm must be increased.
2. The present farms must be more extensively exploited.

The first alternative is hardly possible in the old continents like Europe. A slight increase may be possible in some countries and more land may be brought under cultivation by reclamation and other such improvement schemes, but, on the whole, the chances of increasing the total area under cultivation to any considerable extent are rather remote.

The other alternative is that the present farms must be exploited more extensively. To do that more capital is required. It has been found that it is countries which have the largest capital investment per unit of labour, not those which have the largest farm units, which have the highest standard of living. This experience is corroborated by the farm statistics which show that the largest profits are earned by the farmers with the largest capital equipment in relation to labour and not by the large farm unit as such. If this is so, the provision of credit to farms at reasonable rates of interest (provided the credit is well used) will go a long way towards solving the most important problem of the low standard of living prevalent amongst the peasant farmers.

Unfortunately, the tendency to split big farms into small farms has been rather on the increase. The breaking-up of big estates and the creation of small farms has made the problem of agricultural credit very difficult indeed. Since the end of the Great War there has been an increasing tendency towards small-scale farming. How far is this

[1] One hectare is equal to 2·471 acres.

movement the result of economic causes and how far has it been influenced by political considerations? It is difficult to say precisely. However, this much is clear, that after the demobilisation of the armies there were two factors which were responsible for the increasing pressure of population on the soil. In the first place, the nightmare of food shortages, which most European countries experienced during the Great War, was still fresh in most people's minds and they were determined to avoid the same situation again at any cost. This tendency received the greatest stimulus when it was discovered that the demobilised soldiers had to be provided for somewhere, and the easiest occupation for which every soldier considered himself fit was farming. Again, the Russian experiment had created a certain consciousness in the small farmers and tenants and their feelings of hatred against the landlord were rising. Such feelings were specially strong in the countries neighbouring Russia, and the Governments in those countries were compelled to provide land to small peasants and landless labourers by splitting up large estates. These new small holders had almost no capital and from the very beginning they started their business badly. There was a growing demand for land reform to facilitate ownership of land. At the same time policies of autarky were followed by most European countries, the result of which was that the agrarian products of Eastern European countries could not find any market in other European countries. As a consequence, the tendency towards the starting of industries began in agrarian countries and gained pace very quickly. These industries could only be developed at a heavy cost, which had to be borne by the agriculturists in these countries.

The small farmer, though weak economically, is very strong politically in most European countries and he did not hesitate to utilise this power to his own benefit. As a result, the State had begun to help the farmers at very frequent intervals, which has resulted in a vicious circle. Owing to the monetary and exchange controls the private agencies which used to provide credit for the farmer, especially long-term credit, are no longer able to do so. There has been a great decrease in the credit provided by the private agencies

and this function has also now been taken up by the Governments in many European countries. The development, in order of sequence in farm credit, has been as follows:—

"1. Breakdown in competitive commercial credit.

2. The Government enters the farm credit field as a relief measure usually using the co-operative credit system as a means. Debt moratoria are common.

3. The co-operative credit system disappears except in name.

4. Other credit sources dry up and fail to re-enter the field after the emergency has passed.

5. Credit policy becomes fused with general Government policy and emphasis shifts to social and political needs.

6. The land policy is formed to develop a small non-commercial, self-sufficient or peasant farm economy. Farm tenancy declines and farm indebtedness rises until farms become essentially tenants of the State."[2]

It is the uneconomic type of farm where the provision of credit is most difficult. A number of European countries are following this policy. They are not content wth this, and the tendency has been towards making such small farms inalienable. In Germany it has been pushed to the limit where the farm of a certain size is inalienable and it cannot be sold for payment of any debts. The Hereditary Legislation of 1933, which affects about 50%of the German farm land area, provides that all farms from 75 to 125 hectares in size are hereditary farms which cannot be affected. This means that there is no security on which money could be loaned to farms in such countries. In cases like these it is impossible for any financial institution to provide credit and in

[2] E. C. Young, "Farm Credit and Government," in *Journal of Farm Economics,* August, 1938.

the scheme of provision of credit which follows, such countries are automatically excluded unless they modify their existing attitude.

Extension of Credit

At this stage another very important issue arises. The agrarian countries of Europe, who are producing cereals and other cheap agricultural products, are producing a good deal more than can be sold in the markets of the world in these days of economic autarky. In the circumstances it may be asked what is the use of providing them with more credit? The increased use of credit will ordinarily help them to produce more of these commodities with which they will further glut the market and thereby reduce the prices of these commodities still further. This is what happened in the last great depression. When the farmers found themselves with reduced income owing to the fall of prices, they tried to recoup the losses by producing more, thereby reducing the prices and aiding their own destruction.

I am afraid if the present policies of the countries to increase the number of uneconomic farms for political or social considerations continue, the provision of more credit will not help the farmer unless the basis of production is changed. But a small farm instead of being a liability may prove an asset, if a proper type of intensive cultivation is carried on.

It is a matter of great relief that the situation has begun to change in some countries. The enlightened peasants, when they get adequate financial help, do change the course of their production with the change in world demand, and in countries where they can get adequate credit to finance the new expensive types of crops, they do not fail to do so. This is well illustrated from the experience of Bulgaria where the change seems to be most striking and where the facilities for the provision of credit are fairly adequate. Before the last War, cereals accounted for 66% of her exports, fruit for 2% and tobacco for 1·3%. In 1935, the exports of cereals had fallen to 18%, while the exports of fruits had risen to 10% and that of tobacco to 41% of her total exports.

In most economic enquiries, emphasis has been laid on the fact that a farmer should not persist in continuing with the production of cereals and other crops for which there is already an over-supply on the market. He should try to change his production to more expensive types of crops such as vegetables, fruit gardening and poultry farming. Perhaps it is not fully realised that all these types of production require far more capital than the farmer has in the present circumstances. Unless and until adequate facilities are provided to the farmer to borrow money at a rate of interest which can leave him a fair margin of profit it is not fair to condemn him for persisting in continuing his traditional methods of production. It has been found that in most Eastern European countries, present rates of interest (having due regard to the risks and other factors) are rather excessive, and there is need for machinery which would mobilise the saving of the country or attract saving even from abroad, whereby the farmer could be provided with further credit, and he could also then be advised to change to these new types of production, which would not only increase his own income and standard of living, but would also help to create a better type of peasantry with a higher standard of living, which state of affairs will also help the other countries of the world by raising the demand for their products by the peasants in these countries. Therefore, it is a matter of great interest, I should say of self-interest, to the industrial countries of the world, that adequate facilities should be made available to the small farmers to borrow money at reasonable rates of interest, and they should be guided in the use of this credit.

Hyderabad. A. I. QURESHI.

The Need for the Study of Insurance Finance

The financial mechanism of a nation is, in modern times, probably the most important part of its economic equipment. The prime importance of this financial mechanism is of recent growth, being a product and the logical sequence of the growth of investment system, mainly during the nineteenth century[1]. The raison *d'être* of this part of the economic organization rests on the modern necessity of facilitating and controlling the flow of new savings from those who make them to those who use them. Its direct and epitomical illustration is a modern bank which, as a writer[2] puts it, borrows with one hand in order to lend with the other, an essential function which remains the same whether the bank is a vast joint-stock organization, with a wealth of resources and a network of branches and agencies, or a comparatively small private bank, or "a pioneer bank in a new country, with a stock-in-trade consisting of a tent, a safe, a trestle table and a revolver."

A very important limb of the financial organization of a country are the insurance companies, which are responsible for investing a considerable part of the country's savings. Unfortunately, things have not been so far seen in their proper perspective, and insurance finance, in spite of its first-rate importance, has been eclipsed and over-shadowed by industrial and banking finance.

Recently, some writers have begun to pay attention to Insurance Finance also and attempts have been made to save it from being choked up by its two pampered sisters.

The great importance of insurance companies as channels of investment can be realised from the fact that in 1932 the total assets of the British insurance companies totalled approximately £1,373 million and, of this amount, about £1,200 million was invested.[3] No less immense are

[1] For an interesting account of this subject, see J. M. Keynes, *A Tract on Monetary Reform*, Chapter I.

[2] Thomas, S. E., *Banker and Customer*, Chapter I.

[3] *Statist Insurance Supplement*, July 8, 1933.

the American figures. The assets of the United States life insurance companies at the end of 1926, amounted to $12,850,000,000. They exceeded, in the aggregate, the assets of all Savings Banks, and approximated half of the resources of all national banks. They were greater than one half of the total value of all the railroad trackage and equipment of the nation. They were greater than the value of the word's supply of monetary gold by one-third, and were equivalent to more than one-thirtieth of the national wealth.[4]

It is, therefore, a very fascinating, interesting and useful task to study how insurance companies obtain the possession of these enormous funds and what guiding principles they must follow in the investment of these funds. Unfortunately, the systematic study of insurance finance, particularly of the subject of insurance funds and their investment made so far is very meagre. On this latter subject, there are few good books in the English language. Out of these, L. W. Zartman's, *Investments of Life Insurance Companies*, and Paish and Schwartz's *Insurance Funds and their Investments* (1934) are important. The rest of the available authoritative material is in the proceedings and transactions of the bodies like the International Congress of Actuaries, Faculties of Actuaries, Institute of Actuaries, and Life Insurance Presidents' Association (U. S. A.).

Insurance journals and magazines and the Government Blue Books of various countries also throw random light on the subject with special reference to their own country. All this material still remains haphazardly scattered. A student of the subject has, therefore, to collect and digest this material, and then by winnowing out the mathematical and actuarial complexities, fashioning it according to the needs and trends of time and varnishing it with his own concepts and suggestions in theoretical niceties and practical aspects, distil it into a crystal liquid that he himself may relish and others appreciate. The importance of such a study is too obvious to need emphasis.

[4] See Dr. Ecker, "Investment Tendencies of Life Insurance Companies," *Insurance Review*, March 16, 1936.

The importance of this study consists not so much in its hitherto academic neglect, as in the fact that this subject is the very backbone of insurance offices; the latter must swim or sink with their financial soundness or weakness. Moreover, the subject requires fresh light and fresh verification every now and then because the angles of vision which direct the whole show, in this as in other spheres, are undergoing rapid and violent changes. For example, the national tinge which must be imparted to insurance companies' investment policy is a new feature, coming into importance since the recent resurrection of Mercantilism and Colbertism in the guise of economic nationalism, and it has to be decided how far insurance companies, through their investments, should or can contribute to the national strength while remaining as secure as the rock of Gibraltar. The situation is critical because, while the patriotic spur leads to an all-round national and comparatively lax policy in investment, consarvatism acts as a strong brake on the rapidly moving wheels of dynamic trends and tendencies; and insurance experts must chalk out "the Golden mean." Well-aimed shots at the gilt-edged bull's-eye, dwersification of investment and such other stock ideals have been shorn of much of their ancient glory and the whole question is in a melting-pot. The subject, therefore, needs careful and fresh study on the part of experts. Economists of our country must realise the importance of the matter. They must shake off their self-complacent aloofness, study the central and cognate problems and afford the much-needed guidance.

Allahabad University. AMAR NARAIN AGARWALA.

A Note on the Problem of a Durable Good

In this note we shall consider a small producer whose operations do not affect market prices appreciably. In the first section we outline a solution of a simple case of this problem, where the entrepreneur has sufficient information to decide the price trend. In the second section we deal with the case of a producer who has only sufficient information to decide which prices should be regarded as being more likely.

§1. We choose as zero time the date of purchase of a durable good costing A. With it the entrepreneur could produce articles B starting from a commodity a. The period of production is fixed, k years, and the life of A is n years, irrespective of the amount of use to which it is put, n being large in comparison with k. The product is sold as soon as it is ready and is not stored. In addition, we assume a constant interest rate of 100 r computed continuously.

Starting with a units of commodity a let $f(a)$ units of B be produced. Further, let the quantities a and the amount of labour b needed for its treatment be given by the equation $b(\gamma)=\phi(a)$ where b depends also on the time γ from the date of purchase of this particular unit of a, and vanishes after k years.

The entrepreneur forecasts the prices of B, a, and labour at time t as the functions of t, $B(t)$ α (t), $\beta(t)$ respectively. In addition to the costs of material and labour let us suppose he has fixed costs of c per year. It will be seen that the method can be readily adapted to the case where the manufacture of B requires fixed proportions of other commodities as well.

Let us now consider a small interval $\triangle t$ at time t. Let us suppose the function $a(t)$ of t gives the quantity of the raw material a which the entrepreneur treats at time t. His income from the sale of articles produced in this short period will be $f\left\{a(t\text{-}k)\right.$. $B(t)\ \triangle t$.

His costs will be for raw materials, $a(t)\cdot\alpha(t)\ \triangle t$

$$\text{for labour, } \triangle t\ \beta(t) \left\{ \int_{-k}^{0} \phi\{a(t-\gamma)\} d\gamma \right\}$$

and as fixed charges, $c\ \triangle t$

His profits in respect of this period are, therefore,

$$\triangle t \Big[f\{a(t-k)\}\beta(t) - a(t)\alpha(t) - \beta(t) \left\{ \int_{-k}^{0} \phi\{a(t-\gamma)\} d\gamma \right\} - c \Big]$$

The discounted value of this quantity is obtained by multiplying by e^{-rt} where e^{r} is the exponential function, and the total profit discounted to zero time is

$$\int_{0}^{n} \Big[f\{a(t-k)\}\beta(t) - a(t)\alpha(t) - \beta(t) \left\{ \int_{-k}^{0} \phi\{a(t-\gamma)\} d\gamma \right\} - c \Big] e^{rt}\, dt. \quad (1)$$

subject to the conditions that portions of the integrand lying outside the period, $(o—n)$ are neglected.

The entrepreneur's policy would, therefore, be to choose $a(t)$ in such a way as to maximise the ratio of the expression (1) to A. This problem could be solved by using the method of Calculus of Variations.

§2. It is not often, however, that an ordinarily prudent entreprenear would undertake to forecast the price trend by assigning a definite price for each particular time. This forecast is much more likely to take the form that one price is very probable but higher and lower prices are not impossible. In mathematical language, he assigns only a probability of price to the particular instance of the period under consideration. Thus we have to substitute for the $B(t)$, $\alpha\ (t)$ and $\beta\ (t)$ of the preceding paragraph curves $p_1\ (t)$, $p_2\ (t)$, $p_3\ (t)$, connecting positive values of B, α and β with the the probabilities assigned ot them (negative values are regarded as inconceivable). Where the value is regarded as impossible the probability O is assigned to it and where it is regarded as certain the value 1. We consider only a "continuous" probability distribution. The discontinuous case is simpler and the modifications required are obvious.

Since we assigned the value 1 to certainty $\int_0^\infty p_1(B, t)\, dB = 1$ for all values of t and similarly for p_2 and p_3.

Instead of our anticipated income and expenditure we obtain quantities which we may term the expectation of income or expenditure. For snstance, with an assumed price B his income in time $\triangle t$ has $f\{a(t-k)\}B\triangle t$. The probability that the price lies between B and $B+dB$ is $p_1(B, t)\, dB$. The expectation of profit is obtained by multiplying this with the corresponding value of p and integrating over all positive values of B, i.e., $\triangle t \int^\infty p_1(B\ t). f\{a(t-k)\}\, BdB$

If we suppose that the entrepreneur would seek to maximise the ratio of his discounted expectation of profit to A we can again determine $a(t)$ by the methods of the Calculus of Variations.

Colombo. H. E. PERIES.

"THE GROWTH OF FEDERAL FINANCE"

Correspondence

Sir,

In his review of my book "The Growth of Federal Finance in India" published in the Indian Journal of Economics for July, 1940, Dr. Gyan Chand states that my account of decentralization conveys the impression that the early proposals for financial devolution were the beginning of federal finance. This gives an utterly wrong idea of my book. My chapters on decentralization do not give the slightest impression that decentralized finance was federal finance. It is true that in Chapter XII of the book I deal with certain proposals which were of a somewhat federal character; and Richard Strachey, the author of this proposal, drew his analogy from the financial system of the U.S.A. But this proposal was abandoned, and the decentralization measure of 1870 was *not* federal in character. Yet, this was the first step in the progress towards federalism, and this will not be denied by Dr. Chand. There is ample justification for the title "The Growth of Federal Finance in India." It is true that the outbreak of war (which happened just after the book was published) has put off an all-India federation, but the federal character of British Indian finances still remains intact, in spite of encroachments on provincial autonomy inevitable in war time.

My whole position in this matter has been made crystal-clear in the preface of the book. "With the inauguration of Provincial Autonomy on April 1, 1937, federal finance has become an accomplished fact in British India. This is the final stage of a development that has been going on since 1870 . . . . In 1870, Lord Mayo made a beginning in decentralized finance, and it has since developed by successive stages into federal finance." This is the idea worked out in the book. The other points in the review are matters of opinion, and their is no need for me to make any remarks regarding them.

P. J. THOMAS.

REVIEWS OF BOOKS

INDIAN AGRICULTURAL STATISTICS (An Introductory study)—by Dr. P. J. Thomas & N. Sundararama Sastry. Madras University Economics Series. No. 3. Pp. 144, 1939. Price not stated.

One could hardly think of a more important subject in the sphere of economics in India than agricultural statistics, and the authors are to be congratulated on presenting this small volume to the student and the general reader. Statistics we have few in this country, those relating to agriculture are few and far between, and the degree of accuracy of such statistics is deplorably low. In the words of the authors: "Unfortunately, even in the case of crops for which independent estimates can be made, the discrepancies between the figures of the "post mortem" examination and the revised estimates made now exceed reasonable limits. It was pointed out by Mr. (now Sir) H. A. F. Lindsay in 1934 that 'taking the last ten years for which statistics are available, the trade record of the actual cotton crop which came into sight each season exceeded the official estimate by 838,000 bales on a total annual average crop for the ten years of 5,380,000 bales. In the case of jute, the trade estimate exceeded the official estimate by 119,000 bales each season on an annual average crop during the ten years of 8,633,000 bales'". If this is the condition with regard to crops like cotton and jute, the situation is much worse in the case of food grains. A considerable portion of the food grains does not enter the market at all, being transferred direct from the threshing floor to the household or underground granary. And these are the statistics on the basis of which we build up our theories and calculations!

The volume comprises four parts: (1) the historical side of these statistics (covering the major portion of the space), (2) statistical tables which are of great use, being compilations for previous quinquenniums, (3) accounts of the way in which such statistics are compiled in he U. S. A. and in England and Wales, and (4) discussions on a few related problems like a census of production, food supply and population, the national income of India and the general standard of life. Most of the latest figures are for 1935-36: one wishes that later figures were included: only the other day the Punjab Board of Economic Inquiry has issued a volume on the agricultural statistics of that Province for the year 1937-38.

The random sample method is recommended for estimating crops. *The* point to be remembered in this connection is that whereas this method has proved useful in America and in Europe where standardisation is the rule, here in India, the selection of samples would be much more difficult: in the best of agricultural seasons, almost every village has *some* poor fields consequent on the poverty or the indifference of the cultivator. The observations of the authors are interesting: "In the first instance, a fixed panel of three or four farms in each of about two hundred villages in each district should be chosen by a random method The method of estimating the average yield of these fields may be on the same lines as in crop cutting experiments. The estimate of the mean yield of the district will be available immediately after the last of the sampled farms is harvested."

One uniform statistical year and one uniform set of weights for the whole country—these will spell far greater benefits to the country economically than dominion status could secure in the political sphere, but for reasons not known and not understandable, the authorities in India have slept over this absolutely fundamental reform. In the name of "culture", "tradition", "prestige" or "autonomy", many a microscopic tract in India has stuck to its own year and its own weights. Some minor Indian States send some statistics and do not send the rest. The result is that data became available rather late, and even then such data do not give a correct presentation, being for different periods and in different units. Even in regulated markets, old weights and nomenclature continue, and the result is that statistics are not handy. Surely, no one would lose by an immediate adoption of a uniform year and a uniform set of weights over the whole country, and one wishes that the authors had given more space to this all important reform yet being postponed.

The tables are very interesting, but it would be better to include figures for population (if possible) and for land transfers—as has been done in a recent publication by the Punjab Board of Economic Inquiry on the same subject so far the Punjab is concerned. The authors have done well in including a table on industrial production comprising ten mechanised industries (Table IX) because after all these industries ultimately must depend on the primary raw material coming from the land (either minerals or crops).

The paragraphs on the national income of India briefly review the estimates since 1900 and close with that for 1926-27 by Mr. Findlay Shirras at Rs. 2,804 crores, comparing this with Col. Olver's estimate of income from livestock in 1929 at Rs. 1898·56 crores. The tables appended to the volume do give figures however crude, with regard to agricultural and industrial production, and one wishes very much that the authors had attempted an esti-

mate of the national income in 1938: it is a poor compliment indeed that experts like the authors should stop short at 1926-27. The difficulties in the way are stupendous, but it is hoped that their second volume on this subject (the present is only "an introductory study") will include an estimate of the national income by the authors themselves.

On food supply and population, the authors have some very sound comments to make. With analysed figures they dismiss the fear of insufficient food supply as baseless, but point out that the urgency for more milk and more vegetables is great. They quote Sir John Russell to say that the yield of staple crops on the existing acreage should be increased, and more land must be made available for dairy produce and vegetables: this would be the basis for crop planning in India. They further argue, and rightly, that the real issue is one of income and not of food supply only. They point out that "before 1914 India imported nearly the whole of its sugar, iron and steel goods, cement and paper, and three-fourths of its cotton piecegoods, but today this country produces nearly all its sugar and matches, two-thirds of its iron and steel goods, and three-fourths of its cotton piecegoods and a. good part of its cement . . ." This must mean more income for the country, and however much maldistribution might reign, it must mean a higher standard of living in the country as a whole. They have rightly struck a nail on the head of the spectre of over-population raised by some of our administrators and even some of our economists by pointing out that in this matter international comparisons are of no value. A great deal depends on how far nature helps the poorest classes by its congeniality, how far the public authorities provide for public enlightenment and comfort—perhaps to a greater extent than what the level of the wage is of the poorest classes.

There can be no difference of opinion with regard to the vital importance of an all-pervading census of production, and the observations of the authors deserve careful consideration by the authorities and the public: "With the help of the Universities and the active co-operation of the Departments of Revenue, Agriculture and Co-operation, the cost of such a census could be kept within reasonable limits. If a thorough census is taken once, the cost of future censuses will not be considerable. India has lately taken a step forward in constitutional development, and there is in every Province keen interest in rural uplift. This is just the time to make an economic survey of the whole country. It would provide very valuable data for drawing up plans for a general economic advance, and it would also provide a starting point from which he could measure in future the success of the various efforts at rural amelioration which have lately been inaugurated in many parts of the country."

S. KESAVA IYENGAR.

A GUIDE TO PUNJAB GOVERNMENT REPORTS AND STATISTICS: Publication No. 10 of the Board of Economic Inquiry, Punjab: by Cyril P. K. Fazal, Assistant Secretary, Board of Economic Inquiry, Punjab: 1939. Pp. 256: price Rs. 2.

As Professor L. C. Jain says in his Preface, this is the first attempt of its kind in India to facilitate the study of Provincial problems by students in Government archives, and Mr. Fazal deserves to be congratulated on his patience and industry. In all, 46 Departmental Reports have been indexed, and Mr. Fazal has tried his best to give clear expositions of the four corners of each of these Reports.

Even the Punjab is not free from "belated" reports. Prof. Jain says: "In some cases it was noticed that two issues of a report appeared in one year, presumably in an attempt to work off arrears in publications. In eight cases the reports relate to the year 1936-37 although more than a year has elapsed since new reports were due. Delays such as this detract seriously from the general as well as the statistical value of these reports." Apart from its apparent high value to students, another use of this volume will be that the defaulting Departments of Government will come to be prominently and frequently recognised by Government. In other parts of India where we have not got such a publication, "ignorance is bliss."

S. KESAVA IYENGAR.

URBAN WORKING CLASS COST OF LIVING INDEX NUMBERS (1938). IN THE PUNJAB: Publication No. 65 of the Board of Economic Inquiry, Punjab, by Rai Bahadur Ram Lal, M.B.E., P.C.S., Director of Industries, Punjab: 19 pp. including five graphs and five statements: 1939: price As. 8.

This is yet another publication which must prove of great interest to the student of Indian prices and cost of living. This is the third yearly report on cost of living index numbers in five urban centres of the Punjab, namely, Sialkot, Ludhiana, Rohtak, Lahore and Multan. At the end of each month, retail prices ruling in each of these centres were noted by the local Superintendents of Industries, and the indices were compiled on their basis for each of the five centres separately. The "group" index and the "general" index are arrived at by simple arithmetical calculations after allotting to each item and each group of items suitable weightages, differing in each of the five centres on the basis of the importance of each item in each locality. The "weightage" was allotted on the basis of intensive inquiries into family budgets of working classes. Seventy-five per cent. of the gross expenditure by the working classes is accounted for by food articles, fuel and

lighting, clothing, house rent and miscellaneous, and the balance of 25 per cent. covered by items like education, marriages, interest on debts, travelling and religious performances—which are not accounted for in these index numbers for the evident reason that no "prices" could be ascertained for these items.

In 1938, there was a general lowering in the general cost of living, varying between 12·8 and 5·5 per cent., and this was mainly due to lower prices of food commodities. The methods followed in compiling the data and calculating the index numbers are explained clearly, and the graphs and the tables give the entire data on which the index numbers are based. The author, with his valuable administrative experience, wisely refrains even from drawing an average for the whole of the Punjab on the basis of these figures for the five centres as he feels that such an average would be unreal. And he warns the reader against comparing his figures with those for other parts of India or for other countries: for one thing, the basic periods are different, and for another, the "weightages" for the different commodities would naturally differ as amongst different places. This caution against averages bears a striking contrast to the ease and confidence with which some of our "population" experts estimate calories and divide the total amount by the total population and arrive at figures connoting doubt, despondency or despair.

The opinion of Mr. B. K. Madan who has written the Preface that "in India, in spite of custom, wages and retail prices have proved more flexible, the economic system is more plastic, and a movement away from equilibrium is, in general, corrected more quickly than in many Western countries", coming from an expert having first hand knowledge of trends, is indeed heartening, but surely the comment he has made applies only to urban workers. At the end of a perusal of this tiny volume bristling with facts, one's thought is provoked towards the state of affairs with regard to rural cost of living figures. Indeed, it would be much more difficult to evolve index numbers for rural cost of living, but the most appropriate body to make a beginning in this all important work, is the Punjab Board of Economic Inquiry.

S. KESAVA IYENGAR.

COMMODITY PRICES IN SOUTH INDIA, 1918—1938: by Dr. P. J. Thomas and N. Sundararama Sastry: Bulletin No. 3 of the Department of Economics, University of Madras: 1940: Pp. 64: Price Re. 1.

This is a reprint, with some alterations, of articles published in the Madras University Journal of July, 1939. Five commodities are dealt with, namely, rice, coconut, groundnut, sugarcane and pepper. When the authors decided to reprint the material in bulletin form, it would have been better to include a few other important crops like cotton and jowar. Even with regard to the crops handled, it is entirely an intramural study based on some tables from the League of Nations, some of the commodity investigations like Patel's "coconut" and the Tariff Board's "sugar", and some periodicals like the *Indian Trade Journal* and the *Review of the Trade of India*. Although the title of the publication gives 1938 as the last year included in the work, many of the tables stop short of earlier years—from 1931 to 1937. In some of the discussions, later reports have not been used while earlier reports are referred to generously. For example, many of the observations made on the basis of the Sugar Reports by the Tariff Board would have been more valuable and more up to date if they had been based on the series of later reports on sugar by the Director, The Institute of Sugar Technology, Cawnpore.

The tables compiled and reprinted serve a very useful purpose in showing the reader how, in the course of decades, Indian money utterly lacked in the fundamental connotation of a good currency, namely, stability of value. For instance, over ten million acres are under rice in Madras, about five million tons of rice are produced annually, the life and prosperity of the cultivator is so vitally related to the price of rice although it is mainly a food crop (and not a cash crop). But, the index number of the price of rice, taking the post-war triennium 1918—1920 as the base, was at 73 in 1913-14, 112 in 1919-20, 61 in 1930-31, 40 in 1933-34, and 50 in 1938-39. As all know, the behaviour of rice is not exceptional but only indicative of the general rule.

The League of Nations Tables showing production in different countries of the world are highly useful in showing the reader that compared to countries like the U.S.A., Dutch East Indies, Philipines, Siam and Japan, the production per acre in India is generally incomparably low. We have an I.C.A.R. of dimensions not known in any of those countries—so far as research is concerned—but results are lacking. Some little improvement during the last decade would have been there perhaps even without the I.C.A.R. and it is high time that the I.C.A.R. devotes more attention to the commercial side of the problem and helps the average cultivator in growing more and growing better.

S. KESAVA IYENGAR.

AGRICULTURAL STATISTICS OF THE (BRITISH) PUNJAB, 1937-38, being the second Supplement to "Agricultural Statistics of the Punjab, 1901-2 to 1935-36", Publication No. 52 of the Punjab Board of Economic Inquiry: compiled by Gulshan Rai, B.Com.: 1939. 15 pp.: Price As. 4.

This publication comprises 65 tables of which five are new ones. These new ones deal respectively with disbursements, collections and outstandings of principal under the Land Improvement Loans and Agriculturists Loans Acts from 1901-2, the Punjab budget estimates for 1939-40 with actuals for 1937-38 and revised estimates for 1938-39, the general incidence of water rates since 1924-25, and the gross expenditure, income and net expenditure by the Punjab Government on the Agricultural, Veterinary and Co-operative Departments since 1916-17. Supplement No. 1 issued last year added new tables on population and the area and outturn of crops. The publication has been issued with a Preface by Mr. B. K. Madan who appears to have supervised the compilation.

The tables are highly interesting, and the most prominent thought that occurs to one's mind on glancing through the figures is why similar publications are not issued by all the other Provinces and major States in India. The special value of this small publication is that the story of the Punjab's agricultural progress is given in the short span of 15 pages for handy reference. The price of the volume has been kept very low, and one is bound to envy the undergraduate of the Punjab who is able to know so much about his own Province so easily, so cheaply and so promptly.

S. KESAVA IYENGAR.

HOPONSIA, OR THE SEXUAL AND ECONOMIC FOUNDATIONS OF A NEW SOCIETY, by J. D. Unwin. Published by George Allen and Unwin, Ltd., London, 1940. Pp. 475. 21s.

Hoponsia is an attempt on the part of late Mr. Unwin to indicate the conditions under which, according to the idea of the author, a really energetic society is likely to be evolved. The author has tried to establish that there is a very close connection between the degree of sexual restraint exercised by a community and the all-round energy displayed by it. From this he argues that if a community wishes to become energetic and to rise higher and higher in the scale of civilization, then it should adopt a deliberate programme of sex restraint. I must confess that from the data utilised by the author the conclusion arrived at by him does not seem to follow as explicitly as the author has taken it to be. This approach is certainly scientific but the conclusion

arrived at is very much of the same nature as time after time he characterises in others, to be "temperamental."

In common with the studied practice of the British people, he has completely ignored India in this connection as if the history and civilisation of the country had nothing to contribute towards the establishment of a relationship between sex restraint and energy. As pointed out by Hawley in the Introduction, Unwin's idea if translated into practice would result in that four-fold division of society into Brahman, Kshatriya, Vaishya and Sudra, which were the chief characteristic of the ancient Vedic Indian civilization with its four Ashramas and the very strict sex-restraint contemplated under the well-known Brahmacharya regulation, both during pre-nuptial and post-nuptial periods. And there is ample evidence to indicate that so long as the people of India followed the system, the people were really energetic, and ever rising in the scale of civilization. When the restrictions were gone, degeneration set in and here we are at the bottom of an abyss—our present laughed at and our past ignored. But I am glad to note that Unwin did hit at a truth, ages ago realised and prcatised in our country.

The other salient feature of the Hopensian society would be the absence of money and credit in their present form. To start with, Unwin makes a distinction between money and currency. Money according to him has only to function as common denominator of goods and services to be bought and sold in the society, and as such any non-mathematical symbol and its multiples or sub-multiples could be adopted and utilised. Currency according to him is that which actually passes current from hand to hand in the settlement of transactions. For this he recommends cheques as the ideal thing. The proposed guild of bankers will credit each individual with what each he or she is able to earn as also with any credit that the guild may decide to advance in view of his or her normal productive capacity. Against this the individuals will go on drawing their cheques, and the process will continue. Private property there will be, but everything will extinguish after the death of the individual. No interest will be charged and none paid. If one wants a house or a machine the appropriate guilds will supply him with the commodities and the guild of bankers with the cash to pay for them, and then realise the sum without interest by instalments spread over the life-time of the commodity supplied. After the loan is paid off the commodity will be destroyed, if not naturally exhausted by itself and a new one supplied in its place by the appropriate guild.

The society envisaged by Unwin certainly holds promise of being energetic and progressive and as if the realisation of its component parts is not based on any such radical change in the

human nature as is pre-supposed by communism and other utopian programmes given to us by a host of thinkers, there are chances of its being realised in practice. We have no hesitation in saying that to us the scheme of things delineated by Unwin seems to be both sensible and practical and as such we recommend it very strongly for the serious consideration of our countrymen.

B. G. B.

INDIAN ECONOMICS, Vol. I, by G. B. Jathar and S. G. Beri, 1939, Oxford University Press. Pp. 514. Price Rs. 5.

Indian Economics, by Professors Jathar and Beri is well known to students and teachers of Economics in this country. The two volumes in which it appears are the best text-books on the subject and are prescribed in the prospectuses of practically all universities in India particularly for the B.A. Examination. Both the volumes have gone through a number of editions since they were first published about 1928 which shows alike that there is a keen demand for them and that the authors are anxious to keep them up-to-date. This is the *sixth* revised edition of Volume I. In it the authors have brought facts and figures up-to-date, reviewed the situation in the light of the rural legislation and programmes in the various provinces and discussed the position and problems of the sugar industry as well as recent developments in the hydro-electric projects and irrigation.

The students will find the volume a real help.

G. D. K.

WHAT IS WRONG WITH THE ECONOMIC SYSTEM? by A. W. Knight. Longmans. 1939. Pp. 179. Price 8s. 6d. net.

The individualist economic system ever since it came into being about the middle of the eighteenth century has been subject to periodic breakdowns. This book goes into the working of the system and seeks to answer the question, why do slumps occur? It also suggests a remedy for the disease. The author explains that slumps are inherent in the economic system itself and cannot be checked by 'short cuts to prosperity' like the manipulation of the volume of money and the rate of interest. The system is guided by the profit motive. If it is to run smoothly without inflation or depression two things must balance, *viz.*, (1) saving and investment and (2) production and consumption. When saving exceeds investment and consumption is less than production, trouble arises. As this is bound to happen periodically, slumps

must appear. Improvements in productive efficiency bring about increase of products. They will find a sale if purchasing power of the community rises. This happens in the case of the few profit-receivers and not in the case of the majority. The motive to maximize profits keeps 'costs' which are the incomes of the many, low. These, therefore, cannot consume the increased products. The profit-receivers' help absorbs them for some time but there is a limit to their consumption. Satiation of their wants occurs at some point. The consumption thus falls short of production and further investment must stop which means that saving goes beyond investment. The system breaks: there is unemployment and misery. The author says:—

> "In the last analysis the system suffers its recurring breakdowns because of lack of consumers—an amazing paradox in systems where millions of people are living at or near bare subsistence level. No system can continue, indefinitely, to pour continually increasing riches into the laps of a few. The millionaire can only wear one pair of trousers at a time; he has only one stomach—some of them do not appear even to have that!"

But can the disease be remedied? It can be if the profit motive is tackled and by no 'short cuts to prosperity.' The tackling of the profit motive involves economic planning whose guiding principles will be (1) the control of the volume of investment and (2) the control of income distribution. The author suggests the institution of a properly constituted Planning Commission which will be responsible for carrying out these two principles. He envisages a highly enlightened democracy that will see that the principles are actually and rightly carried out. The master control of that democracy will be the 'common good'—'each for all and all for each.'

The suggestion is excellent indeed. Only it appears to be Utopian. Of course if we can have a democracy of the type conceived, this sordid world of ours would become a heaven.

The book affords interesting and cogent reading and is very clearly written.

G. D. K.

WALTER BAGEHOT. By William Irvine. Longmans Green and Co., Ltd. 1939. Pp. 303. Price 12s. 6d. net.

This book contains fourteen chapters. The first four give a life-sketch of Walter Bagehot and the rest are concerned with him as a thinker, writer and critic. They explain his views on literature, politics, economics and religion. The views are gathered from his literary, biographical and religious essays and the longer works like *The English Constitution, Physics and Politics* and *Lombard Street.*

Bagehot was an active and thoughtful Victorian. "His career, as well as his writings," the author tells us, "was dominated by the concept of a life that should be practical without being worldly or sordid, religious without being narrow or visionary, and without being superficial—many-sided, rich and human."

As an economist Bagehot was an outstanding figure. His *Lombard Street* received high praise at the hands of W. S. Jevons, a contemporary economist who wrote "So far as I am able to judge it is by far the best account which we have of the working of our banking system." Throughout the latter part of his life the Ministers and permanent heads of departments consulted him so much that he was called "a sort of supplementary Chancellor of the Exchequer." Upon his death, Gladstone wrote:—

> "During the time when I was Chancellor of the Exchequer I had the advantage of frequent and free communication with him on all matters of finance and currency. Nor have I in all my experience known any one from whom in this important province more was to be desired, or who was more free or genial in the communication of his large knowledge and matured reflection."

The final estimate the author gives of Walter Bagehot is:

> "Among nineteenth-century thinkers Bagehot was perhaps not one of the greatest, yet he was certainly one of the most universal. As a writer and thinker he did not enjoy the luxury of pre-eminent genius, but he possessed a breadth and balance which such genius frequently lacks. He included within himself much of the past and therefore much of the future. Image of various and widespread confusion, he applied with cool common sense and keen penetration an ancient and profound philosophy to an immense variety of problems, both old and new."

The book presents an excellent biography of Bagehot and depicts clearly his views on various topics. It is a highly readable volume.

G. D. K.

A CENTURY OF SOCIAL THOUGHT. Duke University Press, Durham, North Carolina. Pp. 172. Price $2.

This book presents a series of lectures delivered at Duke University in the year 1938-39 as part of the centennial celebration programme of that institution. The University developed from Trinity College whose origins lie in 1838-39 and whose anniversary was solemnized last academic year. The lectures were given by eminent men in various fields of thought, and discuss in a general way aspects of educational and cultural progress during the past one hundred years. Separately they are, each one of them, a unit in itself but collectively they depict the simultaneous and co-ordinate development of a century in selected fields of learning.

The lectures are given in number: They are (1) "An Evolving Conception of General Education" by Charles Hubbard Judd, former Director of Education of the University of Chicago; (2) " One Hundred Years of Economics " by Harold G. Moulton, President of Brooklings Institution and Director of the Institute of Economics, Washington; (3) " Religion in the Last Hundred Years " by Henry Sloane Coffin, President of Union Theological Seminary of New York; (4) "Science and Belief" by John C. Merriam, former President of Carnegie Institute; (5) " Socio-cultural Trends in Euro-American Culture during the last Hundred Years " by Pitirim Alexandrovitch Sorokin, Chairman of the Department of Sociology at Harvard University; (6) " Plan and Performance " by Robert Moses, Park Commissioner for New York City; and (7) " American Juristic Thinking in the Twentieth Century " by Roscoe Pound, Dean Emeritus of the Law School of Harvard University.

The lectures are at once popular and scientific, and thoroughly repay perusal.

G. D. K.

DISCRIMINATING PROTECTION IN INDIA A SURVEY OF THE TARIFF SINCE 1924, by B. N. Adarkar, M.A. (Cantab).

An analysis of changes in the tariff since the inauguration of the policy of discriminating protection is published in " The History of the Indian Tariff: 1924—39 " by Mr. B. N. Adarkar, issued by the office of the Economic Adviser to the Government of India. The analysis shows the great changes which have occurred in recent years and gives the grounds therefor. A detailed analysis is presented of tariff changes for iron and steel, cotton textile, sericulture, bamboo, paper and pulp, match, heavy chemicals, gold thread and sugar industries. In each

case, the grounds on which protection was granted and the main recommendations of the Tariff Boards which were appointed from time to time have been explained. Moreover, an attempt has been made to explain the significance of every important tariff change and to answer all questions which arise from it regarding the scope of the protective tariff, the actual level of duties and the method of assessment.

The survey also includes a discussion of the way in which the policy of Imperial Preference and the steps taken to regulate the Indo-Japanese trade have affected the structure of the Indian tariff. The main principles which were observed in determining the scope of the trade agreements with the United Kingdom and the Colonies are explained.

B. G. B.

THE ECONOMICS OF A DECLINING POPULATION, by W. B. Reddaway. George Allen and Unwin, Ltd., London, pp. 270. 8s. 6d. net.

It is rather unfortunate that Mr. Reddaway's book has been published at the present juncture. While discussing problems of public finance in chapter 9 of this book the author comments that " a major war will make our whole discussion of public finance (*if not the whole of this book*) *virtually irrelevant*." But, to quote his own words again, it is a book " which seeks to look farther ahead than the next international crisis." Now that the crisis of which he speaks has developed into a major war, the book will not attract the attention it deserves, while a good deal of what he says has already become irrelevant. Nevertheless, as a discussion of long-range economic problems of a declining population, Mr. Reddaway's book has intrinsic merit and has more than passing interest. His general position and the analytical theorems, by which it is backed up, are of intrinsic interest. And as an essay in economic analysis, it will help students of population problems in India to understand the dynamics of an increasing population by a process of inverted reasoning.

Mr. Reddaway begins by reviewing the population trend in Britain. He shows that although the decline in total numbers will not begin immediately and will be small for a considerable number of years, yet with present figures for mortality rates, childless marriages and non-marriages, a decline in population is inevitable, unless fertile marriages produce an average of nearly three children, which is impossible if a family of two continues to be typical. The changing age composition of the population clearly foreshadows the impending change, and the public is asked to

face the situation that the next generation will be 20 p. c. smaller than the present one. Mr. Reddaway is, however, not an alarmist. For one thing, he maintains that "the economic importance of population changes is often grossly exaggerated." For another, he believes that greater welfare per head of population can be secured in the face of declining population provided the economic system is consciously adjusted to the requirements of a declining population. The greater part of the book is devoted to an analysis of the nature and process of such dynamic adjustment. This is an excursion into the region of guess-work and probabilities, but the author's careful analysis has yielded convincing conclusions, a few important aspects of which may be summarised as follows.

Mr. Reddaway first estimates the effects of declining numbers on "particular" and "general" employment. In a country in which population has been increasing fast the re-adjustment of workers to industry caused by shifts in relative demand in different industries is a comparatively easy and less painful process, since such adjustment can be brought about through a diversion of workers to the expanding industries without there being an absolute decline of numbers in the contracting industries. But when population is stationary or is derlining such re-adjustment will cause a considerable absolute decline of employment in contracting industries. Moreover, the shifts of demand are likely to be more numerous, because the average real income per head being higher, people will spend a larger proportion of their income on semi-luxuries and luxuries, in regard to which consumers' preference will change in a fitful and unpredictable manner. Since a declining population increases the risks of over-capacity especially as demand may always recede, both employers and workers will combine to make the economic system rigid and less amenable to adjustments. Hence, Mr. Reddaway is convinced that special measures are necessary to smooth the process of economic adjustment.

The author realizes, however, that the crux of the problem that he is studying is the probable effect of a declining population upon 'general' employment. The analytical tool used by him in handling this problem is the Keynesian theory of the trade cycle. He explains that as the national income increases, so does the gap between income and expenditure on consumption goods. "The production of capital goods generates incomes without adding to the supply of goods to be bought out of those incomes." Hence, it is the level of capital outlay which supplies the stimulus to economic expansion which in its turn determines the level of general employment. Mr. Reddaway tries to estimate the effect of declining numbers upon the level of capital outlay. "There is no theoretical impossibility," he says, "about the maintenance of the level of capital outlay, especially if we visualize a great wave

of inventions; but the probabilities are all against it, unless conscious measures are taken to secure it." One important factor that he emphasises is that owing to the fickleness of demand the risk of over-capacity (when demand recedes) will greatly discourage capital outlay. The author discusses next the deliberate and planned measures necessary either to stimulate outlay and thus start the cumulative process of expansion, or to increase consumption directly and to raise capital outlay only as a secondary effect.

Mr. Reddaway next reviews the position as regards the size of the national income. From the point of view of the income received, the output per employed person will be higher, the larger the amount of capital per head. Now, "the absence of population increase must mean a more rapid rise in capital per head," unless the supply of additional capital falls too much. The author thinks that the supply of additional capital will not, if at all, fall much. (It is assumed that general employment will be maintained at a satisfactory level.) From the point of view of the income received, the average amount of capital owned by each person will be higher in future than in the past. But it may be argued that a declining population will deprive the economic system of the advantages of large-scale production. The author thinks that the situation can be met by reducing the number of companies rather than by reducing their size. In any case, this contingency will not arise when the population is stationary; even when it is declining the expanding market for luxuries will offset the effect of any contraction in the market for necessaries.

As regards the distribution of the national income, the author argues that the return per unit of capital must fall leading to a rise in the rate of wages. The simplicity of this theoretical deduction is, however, discounted by the fact that "the return on old capital in other industries will not be affected (except possibly indirectly), unless some of the savings are directed into them too." This he thinks improbable, because owing to absence of free competition and general uncertainty, the new capital will not be suitably distributed between all possible uses as required by economic theory. Moreover, the general fall in the rate of profit will stimulate research and inventions designed to substitute capital for labour. But the benefits of technical progress will raise, as in the past, the real value of *all* incomes. As regards class distribution, Mr. Reddaway makes the guarded statement that "the division of fortunes amongst fewer heirs may accentuate the influence of inherited wealth."

Next we have two chapters dealing with the effect of a declining population on public finance. A declining population would mean an increase in the bill for pensions, while at the

same time it would raise the yield of death-duties. Mr. Reddaway thinks that the increased pension charges including the war pensions will off-set the increased yield of death-duties, " with death-duties if anything having the advantage." As regards education, from the budgetary point of view the smaller number of children would not be an adequate setoff to the increased number of old people. As regards public debt, " an annual rise of one per cent in average incomes would just prevent the burden of debt from increasing if population were declining by one per cent per annum." An interesting point which the author makes in this connection is that an average rise of prices (through currency management) to the extent of one per cent per annum will do a great deal to reduce the debt burden. But his optimism is shaken when he thinks of the difficulty of avoiding slumps and wars, the cost of defence services, the increasing burden of maintaining the existing standard of social services and the pressure for improved standards in these services.

What will happen to Britain's international trade? The increase in the average real income per head of population will mean more trade, but it will represent a smaller proportion of its total economic activity, because the proportion of people engaged in services will increase, and " services are almost necessarily an internal affair." The total gain derived from foreign trade will be smaller, but since the need for imports would be smaller the terms of trade will be favourable. Moreover, with the cumulative growth of restrictionism in the shape of international trade, the problem of finding export markets will not trouble the British people any longer.

The potentially favourable economic outlook that emerges from Mr. Reddaway's book is based upon the fundamental assmuption that the " nation must become better at tackling the essentially man-made problem of general unemployment." But when one comes to think of it and of the " major war " that has dominated the economic scene the prospect is hardly re-assuring except to those who believe in the triumph of reason.

B. N. GANGULI.

A STUDY OF INDIAN ECONOMICS, by Pramathanath Banerjea. 5th edition. Macmillan & Co., London, 1940, pp. 395. Price 10s. net.

In this the 5th edition of Dr. Banerjea's well-known book, the author has taken the opportunity to recast the text in many places, introduce much additional matter and bring facts and

figures up-to-date. The style is simple and without any frills, and the exposition is remarkably lucid. Sometimes, one feels that space has been needlessly wasted in discussing general principles of Economics, a working knowledge of which is best taken for granted in a book dealing with Indian economic problems. Occasionally also one cannot help feeling that the attitude of strict impartiality and passionless poise is a little overdone lending insipidity to the treatment of some of the controversial problems in Indian Economics. However, the book is admirably planned and in less than 400 pages manages to give an excellent general idea of the whole subject.

G. B. JATHAR.

MONETARY EQUILIBRIUM, by Gunnar Myrdal. William Houge and Co., Ltd., London. 1939, Pp. 214. Price 12s. 6d. net.

This book is a translation of the German edition which was itself a translation of the Swedish text of 1931. The popularity of the book can well be judged from its production in three languages during the course of eight years. The important position that Prof. Myrdal occupies in the University of Stockholm as an authority on monetary problems, gives to this book a *prima facie* value. Coming as it does from the home of Wicksell, who was perhaps the first economist to approach monetary problems from a new theoretical angle, it gives us a very intimate knowledge of the conception of monetary equilibrium. Yet the title of the book is in one sense misleading. We do not find in it as we are naturally led to expect from the title, a systematic exposition of the contents and implications of the concept of monetary equilibrium; we find instead a criticism of Wicksell's ideas woven round the theory of Monetary Equilibrium. The result is that the question,—What is, after all, monetary equilibrium?—remains unanswered, save in a very indirect manner. A majority of readers, the reviewer is sure, will wonder whether Monetary Equilibrium requires that changes in money should merely interpret changes in the behaviour of men in their attitude towards the non-monetary fields of life and whether that means that money should abstain from changing when there is no change elsewhere and abstain from remaining unchanged when there are changes elsewhere. An average reader is sure to ask, What then is non-monetary equilibrium? Does it signify a state in which factors other than money either remain constant or change harmoniously with changes in the monetary fields? Some light is no doubt thrown on these questions, but it is finally the reader himself who will have to answer all these questions.

However, the method adopted by Myrdal has some advantages. In his own words, "The reasons for choosing this immanent method for the analysis and for presenting my own results as a development of Wicksell's theory instead of arranging my exposition more directly and systematically according to positive theoretical principles, are, first, my belief that particularly in the present state of economic theory we should clearly trace the lines of tradition from the older generations of economists in order to prevent our literature from falling any more than necessary into Babylonic barbarism. I hope that this mode of representation will prove to have the advantage for the foreign reader that I shall be able to demonstrate Wicksell's thought more clearly than was possible in the brief survey . . . even if my own positive analysis can be less easily understood than otherwise."

The book contains chapters on Wicksell's Statement of the Problem of Monetary Theory, The Concept of Monetary Equilibrium, Conditions of Monetary Equilibrium (three chapters), The Indifference Field of Monetary Equilibrium, Monetary Equilibrium as a Norm and Methods of Monetary Analysis, with, as usual, one chapter on Introduction.

The criticism of Wicksell's ideas or rather the criticism of their exposition is to be found mosty in the three chapters on the conditions of Monetary Equilibrium and one on the Indifference Field of Monetary Equilibrium.

The sum and substance of the criticism of the second conditions of Monetary Equilibrium of Wicksell is that saving should be equal to value investment, that is, it should be equal to value of real investment plus depreciation minus appreciation. This may technically be a just criticism, but one is likely to wonder whether after all Wicksell did not mean to say the same thing if he did not actually say it!

The criticism of the third condition of Stability of the Price Level is an old one. We know how Wicksell was criticised by Davidson on this point and how he almost accepted that criticism. No economist to-day believes in the stability of the price level as a necessary condition of equilibrium. Wicksell's blunder lay in thinking that since in disequilibrium the price level is changing, so in equilibrium it should be stable. Under certain conditions, however, stability of the price level can become a necessary causal factor for Monetary Equilibrium. Whether those conditions are implied in the consideration of Monetary Equilibrium, depends on what precisely is meant by Monetary Equilibrium. One thing is certain; that stability of the price level is not a necessary condition of equilibrium. Whether we can say the same thing with regard to Monetary Equilibrium,

depends on the clarification of certain ideas relevant to the conception of Monetary Equilibrium.

The chapter on the Indfference Field of Monetary Equilibrium is a difficult one for an average reader. It is pointed out there how there are many rates of interest with a number of combinations of them. More than one combination may create equilibrium situation. In other words, a change in rates may be effected in such a way as to leave the Monetary Equilibrium situation unaffected.

The chapter on Monetary Equilibrium as a Norm is a stimulating reading. Various possible norms are considered besides those of Monetary Equilibrium. It is admitted that monetary manipulation cannot succeed in completely eliminating business cycles. More was Wicksell one of those, as is pointed out in the footnote on page 181, "who wished to reduce business cycle to purely monetary phenomena. which (as! .) might have been suggested by the Monetary Theory which he built up. The monetary and credit relations only give the cycles their acumination as he always emphasized."

The first two chapters of the book are quite good. They indicate the importance of monetary theory in the study of the theory of value. In orthodox economics, the monetary and price theories remained unlinked. There the problems are those of relative prices. with money considered as having no independent value. Value of things could therefore be studied without considering the influence of monetary phenomena. Thus, in the earlier theory one equation is found missing . . . one by which relative prices could be converted into absolute (money) prices. The traditional monetary theory that attempts to fill the gap is the quantity theory of money. But it fails to effect a proper integration of the monetary and price theories. The quantity theory does not supply the multiplicative factor. Thus, general over- or under-production are phenomena which the more orthodox classical theories could not explain. For, the demand for one commodity, was for them, only another expression for the supply of another commodity or commodities. It was Wicksell who made the first systematic attempt at a proper integration of the monetary theories with the general theory.

Prof. Myrdal's book is more for teachers than for students. It is not always easy to keep the central theme in mind while one is going through the various, apparently unconnected, sub-divisions of a chapter.

J. K. Mehta.

BOOKS RECEIVED

1. *Economic Problems of Today.* By W. Arthur Lewis. Published by Messrs Longmans, Green and Co., London. 1940. Pp. 175. 5s. net. [*To be reviewed.*]

2. *Bread and Power.* By E. T. Brown. Published by Messrs William Hodge and Co., Ltd., London. 1940. Pp. 278. 10s. 6d. net. [*To be reviewed.*]

3. *Employment, Wages and International Trade.* Published by the International Labour Office, Geneva. 1940. Pp. 107. 2s. 6d. [*To be reviewed.*]

4. *Science of Economics.* By I. M. Kapoor. Published by The English Book Depot. Lahore. 1940. Pp. 120. Re. 1 12as. [*To be reviewed.*]

5. *Agricultural Marketing in India* (Marketing Series No. 19). (Annual Report of the Agricultural Marketing Adviser and summarised reports of Senior Marketing Officers in Provinces and certain States for the year ending 31st December, 1939). Published by the Manager of Publications, Government of India, Civil Lines, New Delhi. 1940. Pp. 139. 2s. 6d. or Re. 1 10as.

   [This is the fifth annual report of the Agricultural Marketing Adviser to the Government of India, with summarised reports of Senior Marketing officers in Provinces and certain States, for the year ending 31st December, 1939. During this short period much useful work has been done by the Central as well as the Provincial Marketing staffs. A number of useful marketing surveys have been made and the results published in English as well as in some of the Vernaculars. An important new principle for control of quality is the introduction of AGMARK labels. The scheme has worked successfully particularly in connection with the sale of *ghee* at Khurja and at other important *mandis*. The consumers are ready and willing to pay a little higher price for a really genuine thing. This will check adulteration. Another important feature, explained in the report, is the provision of market information regarding prices and supplies, particularly for the benefit of rural listeners. Still there are so many problems, such as, grading and standardisation, storing, common weights and measures, etc., that await solution and proper handling. We hope they will receive the attention of the Department in due course.—*K. L. Govil.*]

6. *Report on the Marketing and Transport of Jute in India* (First Report). Published by the Secretary, Indian Jute Committee, Calcutta. 1940. Pp. 323+xvi. 2s. 6d. or Re. 1 8as. [*To be reviewed.*]

7. *Survey Farm Business in Wai Taluka.* By D. R. Gadgil and V. R. Gadgil. Published by the Director, Gokhale Institute of Politics and Economics, Poona 4. 1940. Pp. 136. Rs. 2 8as. [*To be reviewed.*]

8. *Rural Uplift in Baroda.* By Bhikhalal B. Kapasi. Published by Bhikhalal B. Kapasi, Sayaji Ganj. Baroda. 1940. Pp. 75. Rs. 2.

[This small booklet, we are told by the author, outlines "in brief the development activities of Baroda State with special reference to rural areas" and is an attempt "to co-ordinate all rural activities of the State". It is, on the whole, a descriptive work and as such gives a clear idea of what is being done in Baroda State for improving the economic condition of the agricultural population. But we have failed to find any attempt on the part of the author to offer any suggestions for co-ordinating the uplift activities. Whatever co-ordination there is, would appear to be due to the fact that all initiative in the matter came from a common source, *viz.*, the Ruler of the Baroda State.—*B. G. Bhatnagar.*]

9. *The Cooperative Movement in Bengal.* By J. P. Niyogi, Published by Messrs Macmillan and Co., Ltd., London. 1940. Pp. 267. 10s. 6d net. [*To be reviewed.*]

10. *Modern Banking in India.* By S. K. Muranjan. Published by Messrs New Book Co., Bombay. 1940. Pp. 122. Rs. 7 8as. [*To be reviewed.*]

11. *Monetary Review.* (Money and Banking 1939-40). Published by the League of Nations, Geneva. 1940. Pp. 101. [*To be reviewed.*]

12. *English Economic History mainly since 1700.* By C. R. Fay. Published by Messrs W. Heffer and Sons. Cambridge. 1940. Pp. 253. 5s. net. [*To be reviewed.*]

13. *Arth Shastra Ki Rup Rekha.* By Pt. D. S. Dubey. Published by Pt. D. S. Dubey, Allahabad University, Allahabad. 1940. Pp. 12 plus 491. [*To be reviewed.*]

14. *The Gold Thread Industry of Surat.* (Reprinted from the Journal of the University of Bombay, July, 1940. Vol. IX. Part I). By A. B. Trivedi. 1940, Pp. 27.

[This is a reprint of a paper published in the University of Bombay's *Journal*. The Author received a grant from the University for undertaking research in the problems of the gold thread industry of Surat, which is the principal centre of the industry in India. He is to be congratulated on the production of a very able handbook on a subject on which scanty information is available.—*B. P. A.*]

15. *The Problem of Surplus Agricultural Population*—International Journal of Agrarian Affairs, Vol. I, No. 1. October, 1939. Published by Messrs Oxford University Press, London: Humphrey Milford. Price 3s. 6d. net.

[This is the inaugural number of the *International Journal of Agrarian Affairs*, which is the official organ of the International Conference of Agricultural Economists. The number is devoted to a thorough-going symposium on a single selected topic, *viz.*, the Problem of Surplus Agricultural Population, by several distinguished agricultural economists. Amongst the contributors are Professor J. D. Black (Harvard), and Messrs. H. M. Conacher, M. L. Wilson, J. F. Lattimer, Clayton E. Whipple, A. U. Toteff and P. Stares. Both Professor Black and Mr. Wilson support the subsistence homestead programme as "an expedient for giving a self-respecting life to those who, through the damming up of industrial outlets, cannot find a place there or in commercial agriculture." Mr, Lattimer discusses the effects of restrictions on trade and international mobility of labour. The last three authors stress the importance of levelling up the pressure of population in different areas. Dr. Sam Higginbottom of Allahabad is quoted (on p. 73) from his speech at the last International Conference of Agricultural Economists saying: "I would like to take 30 per cent. of India's population off the land and put it into industry, and I would like to introduce farm machinery, because that is the only way to raise the standard of living."—*B. P. A.*]

16. *The Land of the Two Rivers.* By Baljit Singh. Published by Messrs Indian Press, Ltd., Allahabad. 1940. Pp. 179. Rs. 3. [*To be reviewed.*]

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THE RÔLE OF NATIONAL WAGE AND INCOME STRUCTURES IN INTERNATIONAL TRADE

BY

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In the theory of international trade, a familiar technique has been evolved for dealing with real ratios of exchange. In this field, the work of Torrens[1], Ricardo,[2] J. S. Mill,[3] Marshall[4] and Pareto[5] is too well-known to need emphasis. It is the aim of this paper to show that in order to translate the real exchanges postulated by these authors into reality, certain conditions as to the relative wage and income-structures of the participating countries have to be fulfilled.

I

It will be recalled that in his analysis of international trade, Ricardo assumed two countries, England and Portugal,

[1] *The Economists Refuted*, 1808.

[2] *Principles of Political Economy and Taxation*, Chapter VII.

[3] *Principles*, iii, 1848.

[4] *The Pure Theory of Foreign Trade* (1879).

[5] *Cours d'Economic Politique* (1896).

the latter of which had an absolute advantage in the production of both cloth and wine, being able to produce them with 90 and 80 hours of labour respectively per unit, as against England's 100 and 120 hours respectively per unit. If no international trade took place, England would have a domestic exchange ratio of 1 wine unit = 1·2 cloth units. Portugal would have a domestic exchange ratio of 1 wine unit = 0·88 cloth units. If international trade took place, any ratio between 1·2 and 0·88 units of cloth per 1 unit of wine would benefit both countries. Suppose the ratio 1 wine unit = 1 cloth unit is established. England gets one unit of wine with a less sacrifice of cloth than she would have had to incur, if she had attempted the domestic production of wine. Portugal gets one unit of cloth with less sacrifice for wine than she would have had to incur, if she had attempted the domestic production of cloth. There is thus a saving of labour in both countries, and both countries gain.

Let us put these conditions into convenient symbols and write:

Cc for Cost in Labour Units of Cloth in England.
Cw " " Wine in England.
Kc " " Cloth in Portugal.
Kw " " Wine in Portugal.
Qc for Quantity of Cloth exported from England and
Qw for Quantity of Wine exported from Portugal.

Now it is clearly profitable for England to exchange cloth against wine so long as the potential total cost of producing the amount of wine she requires, say Qw units, is greater than the total cost of producing Qc, the number of units of cloth that Portugal requires in order to part with Qw units of wine.

Hence the condition $Cw\ Qw > Cc\ Qc$ is the profitability condition for England.

Similarly $KwQw < KcQc$ is the profitability condition for Portugal.

Dividing the first inequality by Cc and the second by Kc we get

$\frac{Cw}{Cc}$ Qw>Qc as the profitability condition for England.

$\frac{Kw}{Kc}$ Kw<Qc as the profitability condition for Portugal.

In other words, it is enough for profitable exchange that $\frac{Cw}{Cc} > \frac{Kw}{Kc}$. Multiplying this inequality on both sides by $\frac{Kc}{Cw}$ we get $\frac{Kw}{Cw} < \frac{Kc}{Cc}$. That is to say, Portugal can produce wine with less labour as compared with England, than she can produce cloth. Similarly, since $\frac{Cc}{Kc} < \frac{Cw}{Kw}$, England can produce cloth with less labour as compared to Portugal, than she can produce wine. So each country exports the commodity in which it has the comparative advantage.

In order that this mutually advantageous trade should take place, however, certain other conditions have to be fulfilled. The proximate cause of importing a good is always that its cost in money is less than that of the same type of good produced at home.

Let us for the moment assume a homogeneous gold currency in both countries. Let us assume further that We is the wage-rate, in gold units per hour, in England, and that Wp is the wage-rate, in gold units per hour, in Portugal.

In that case, the Englishman will import wine only when the money cost of one unit of wine produced in Portugal, Kw Wp, is less than the potential money cost of one unit of wine produced in England, Cw We. Similarly the Portuguese will import cloth only when the money cost of one unit of cloth produced in England, CcWe, is less than the potential money cost of one unit of cloth produced in Portugal, KcWp. So we get two further conditions in order that the real exchanges postulated by the theory of comparative costs may be translated into practice through the monetary mechanism. These are

KwWp<CwWe, and

KcWp>CcWe.

Dividing the first inequality by Cw and the second by Cc we get

$$\frac{Kw}{Cw} Wp < We, \text{ and}$$

$$\frac{Kc}{Cc} Wp > We.$$

In other words the English wage is a proportion of the Portuguese wage. This proportion lies between an upper limit of $\frac{Kc}{Cc}$ and a lower limit of $\frac{Kw}{Cw}$. Since in our case both Kw and Kc were smaller than Cw and Cc respectively, the proportion is less than unity, and the English wage must be lower than the Portuguese wage. If Portugal complains that she is being invaded by the products of a race of 'sweated' labourers, and proceeds to erect tariffs against this 'unfair' competition, she is merely relapsing into the state of affairs before international trade, and loses the advantage of getting cloth from England with less sacrifice than she would have had to incur by diverting domestic resources from wine to cloth.

One more condition has still to be fulfilled, before we can regard the trade as being in equilibrium, even in our simplified model. This is Mill's equation of reciprocal demand, which is simply the condition that in equilibrium the value of exports must equal the value of imports. In our notation this would appear as the condition

$$QcCcWe = QwKwWp.$$

It is obvious therefore that

$$We = \left(\frac{Qw\ Kw}{Qc\ Cc}\right) Wp.$$

Our simplified model, then, yields us the following propositions:

1. Each country must have a comparative advantage in respect of the commodity it exports.
2. The ratio of exchange between the two commodities must lie between the limits set by their ratios of costs with respect to each country.

3. The wages in the country with the higher absolute cost-constellation must be lower than in the other country.

These conditions might be clearly illustrated by means of a slight extension of Ricardo's numerical example:

TABLE 1

Country	Commodity	Labour Cost	Money Wages	Money Cost	Units Exported	Value Exported
1	2	3	4	5	6	7
England ...	Cloth ...	100	0·84	84	100	8400
England ...	Wine ...	120	0·84	100·8	...	...
Portugal ...	Cloth ...	90	1·00	90	...	...
Portugal ...	Wine ...	80	1·00	80	105	8400

[*Note*: (1), (2) and (3) Assumed.

(4) The Portuguese wage is assumed. The English wage is calculated from the equation $We = \left(\frac{Qw\ Kw}{Qc\ Cc}\right) Wp$.

(5) 3 × 4.

(6) Assumed in such a way as to lie within the limits of profitable exchange.

(7) 5 × 6.]

Thus English cloth costs less money than Portuguese cloth, and Portuguese wine costs less money than English wine. In order that this condition may be fulfilled, the English money wage is at a lower level than the Portuguese money wage. Since the prices of goods are the same in both countries, the English real wage must also be lower than the Portuguese real wage.

It is clear that the above result has been achieved by drastic simplifying assumptions. These assumptions may be summarized as follows:

1. Only two goods.
2. Constant labour costs.

3. No other costs except labour costs.
4. No transport costs or other items entering into the Balance of Payments.
5. A homogeneous currency system.
6. Only two countries. It is now our task to remove these assumptions one by one.

II

We have seen in Section I that the condition of trade is that $\frac{Cc}{Kc} < \frac{Cw}{Kw}$. If we have a number of commodities entering into the trade between the two countries we can arrange their relative cost ratios on the same type model as $\frac{Ce}{Ke} < \frac{Cw}{Kw}$.

For example, let us assume that six commodities, A, B, C, W, X and Y enter into the trade between the two countries, and that we know the cost data in the two countries to be the following:

TABLE 2

Commodity	A	B	C	W	X	Y
Lab. Cost in Eng. ...	120	105	100	120	100	120
Lab. Cost in Por. ...	90	85	90	80	60	60

Using C to denote cost-data in England, the subscripts standing for the commodities, and K to denote cost-data in Portugal, the subscripts denoting commodities, one can see that

$$\times \frac{Cc}{Kc} < \frac{Cb}{Kb} < \frac{Ca}{Ka} < \frac{Cw}{Kw} < \frac{Cx}{Kx} < \frac{Cy}{Ky} \times$$

In other words, England has a comparative advantage in C over all other commodities. It is quite conceivable that she exports just this one product, importing all the rest. This state of affairs could be maintained only if there were such a great demand for C on the part of Portugal that it counterbalanced the demand of England for all the other commodities. What concerns us most, however, is the fact

that England cannot export a commodity in which she has a lesser comparative advantage than in a commodity which she imports. That is to say, England cannot simultaneously export A and import B, since in the latter she has a better comparative advantage than in the former.

We can think of England as starting the production of C. She produces as much of C as Portugal will take, in addition to her own domestic requirements. Portugal gives in return the commodity for which she has the highest comparative advantage, *viz.*, Y. A ratio of exchange is established between A and Y, on the principles explained in Section I. Neither country, however, can subsist on C and Y alone. So each diverts resources to the other commodities.

Evidently the quantities of C and Y traded between the two countries will now fall.

England finds that instead of producing both B and X it is to her advantage to exchange B against X with Portugal. Portugal also finds it advantageous to reciprocate.

In this way we can "pair off" export and import goods. A is exchanged against Y, B against X, and C against W. In each case, of course, the conditions as to the ratios of exchange laid down in Section I must be fulfilled.

Let us construct a hypothetical table which fulfils all these conditions as to the ratios of exchange:

TABLE 3

Commodity	Labour Cost in Eng.	Labour Cost in Port.	Quantity Exports Eng. to Por.	Quantity Exports Por. to Eng.
1	2	3	4	5
A	120	90	100	...
B	105	85	100	...
C	100	90	100	...
W	120	80	...	104
X	100	60	...	110
	120	60	...	123

[*Note*: If England exports A and imports Y, the international ratio of exchange has to lie between the limits of 1 A = 1 Y (the English domestic ratio of exchange) and 1 A = 1·5 Y (the Portuguese

domestic ratio of exchange. Our assumed international ratio of exchange, 100A : 123Y, lies between these limits. Similarly for the other "pairs" of commodities.]

What will be the equilibrium ratio of English to Portuguese wages per hour?

Mill's equation of reciprocal demand gives us the condition that the value of exports must equal the value of imports. The money price of a good is its labour cost multiplied by the hourly wage. The value of total exports of one good is its money price per unit multiplied by the quantity exported. If we write Qa, Qb, Qc, for the quantities of A, B and C exported from England, and Qw, Qx, Qy for the quantities of W, X and Y exported from Portugal, we get the following expression for Mill's equation:

$$CcWeQc + CbWeQb + CaWeQa = KwWpQw + KxWpQx + KyWpQy.$$

Hence.

$$We = Wp \left(\frac{KwQw}{CcQc}\ \frac{KxQx}{CbQb}\ \frac{KyQy}{CaQa}\right)$$

Substituting in our numerical example above, we find that $We = Wp \left(\frac{22300}{32500}\right)$. Hence We: Wp : :223: 325.

If we assume that $We = 2{\cdot}23$ gold units and $Wp = 3{\cdot}25$ gold units, we get the following tables:

TABLE 4

The Position in England

Commodity	Labour Cost	Money Wage	Money Cost per Unit	Units Exported	Value Exported
1	2	3	4	5	6
A	120	2·23	267·6	100	26760
B	105	2·23	234·15	100	23415
C	100	2·23	223	100	22300
W	120	2·23	267·6	...	...
X	100	2·23	223	...	...
Y	120	2 23	267·6	...	...
		Total Value of Exports		...	72475

TABLE 5

The Position in Portugal

Commodity	Labour Cost	Money Wage	Money Cost per Unit	Units Exported	Value Exported
1	2	3	4	5	6
A	90	3·25	292·5	...	...
B	85	3·25	276·25	...	...
C	90	3·25	292·5	...	...
W	80	3·25	260	104	27040
X	60	3·25	195	110	21450
Y	60	3·25	195	123	23985
		Total Value of Exports ...			72475

[*Note*: (1), (2) and (3) Assumed.

(4) 2 × 3.

(5) Assumed, see Table 3.

(6) 4 × 5.]

As the English Wage

$$= \text{Port. Wage}\left(\frac{\Sigma \text{ Costs} \times \text{Quant. Port. Exports}}{\Sigma \text{ Costs} \times \text{Quant. Eng. Exports}}\right),$$

wages in England can be raised if, ceteris paribus, (a) Portuguese export quantities are increased, (b) Portuguese absolute costs rise, (c) Absolute costs in England fall, (d) English export quantities decrease.

In other words, England can improve her wage structure relatively to Portugal, only if her cost structure falls absolutely (Or if the Portuguese cost structure rises absolutely) and if her terms of trade improve. The first possibility is excluded by our assumption of constant cost. The second is strictly limited by the area of profitable bargains.[6]

[6] It will be noticed that the coefficient by which the Portuguese wage has to be multiplied in order to yield the English wage will be less than unity, if all Portuguese costs are lower absolutely

III

So far we have worked with the assumption that constant labour costs obtain in both countries. We have now to jettison this somewhat unrealistic assumption.

Under our assumption of constant costs we saw how the condition of profitability for both countries is fulfilled when $\frac{Cc}{Kc} < \frac{Cw}{Kw}$. We have seen that under these conditions, England will divert resources to cloth, and Portugal to wine. If we assume increasing costs, what happens?

It is obvious that as England produces more and more cloth, the marginal cost of cloth will rise. In other words, Cc will rise. At the same time, as she contracts the output of wine, Cw will decrease. Similarly, as Portugal diverts resources to wine, Kw will rise, and Kc will fall.

Therefore the difference between $\frac{Cc}{Kc}$ and $\frac{Cw}{Kw}$ is being reduced from four different directions. Sooner or later the two quantities will become equal. The range within which the ratio of profitable bargains can lie is gradually reduced until it becomes zero.

Let us try a controlled experiment. We will keep the first cost ratios as postulated by Ricardo, and the rest of the

than English costs. For if A is to be exported from England, and Y imported in return.

$CaWe < KaWp$, and

$CyWe > KyWp$.

Hence, $\frac{Ky}{Cy}\ Wp < We < \frac{Ka}{Ca}\ Wp$.

Hence, if $Ky < Cy$ and $Ka < Ca$, the coefficient by which Wp has to be multipied in order to yield We lie between limits which are both less than unity.

Similar reasoning will hold good for each 'pair' of import and export commodities. Generalizing, we may say that the money wage-structure—and the real-wage structure also, since the price-levels in both countries are the same in our example—will be lower in the country which is inefficient in the absolute sense in the production of all the commodities. There is the position of England in our illustration.

data as given in our Table 1. We will assume that the differences in the comparative cost ratios are wiped out in the way outlined above. We will further assume that the ratio of exchange is constant at I Cloth = 1·05 wine, although the quantities exchanged go on increasing. In that case, keeping the Portuguese wage constant at 1·00, we find that the English wage, as calculated by the equation in Section 1, takes up the successive values of 0.84, 0.8 and 0.76.

TABLE 6

Commodity	Labour Cost in Eng.	Labour Cost in Por.	Wage in Eng.	Wage in Por.	Price in Eng.	Price in Por.	Quant. Export E to P	Quant. Export P to E	Value Exported
1	2	3	4	5	6	7	8	9	10
					Time A				
Cloth ...	100	90	0·84	1·0	84	90	100	...	8400
Wine ...	120	80	0·84	1·0	100·8	80	...	105	8400
					Time B				
Cloth ...	105	87·5	0·8	1·0	84	87·5	150	...	12600
Wine ..	110	80	0·8	1·0	88	80	...	157·5	12600
					Time C				
Cloth ...	112	87	0·76	1·0	85·05	87	200	...	17010
Wine ...	108	81	0·76	1·0	82·08	81	...	210	17010

[*Note*: (1) Assumed.

(2) Assumed. In England the labour cost of cloth gradually rises, and the labour cost of wine gradually falls.

(3) Assumed. In Portugal the labour cost of cloth gradually falls, and the labour cost of wine gradually rises.

(4) The English wage per hour, calculated from the equation

$$We = \left(\frac{QwKw}{QcCc}\right) Wp,$$ Wp being taken as 1·0.

(5) The Portuguese wage per hour, assumed.

(6) 2×4.

(7) 3×5.

(8) and (9) Assumed. But a constant ratio of exchange of 1 Cloth 1·05 Wine is postulated.

(10) 6×8 for exports from England, and 7×9 for exports from Portugal.]

Here is a case in which there is a gradual expansion of production in the two countries of cloth and wine respectively, to the mutual benefit of both. Yet in order that the trade should be consistent with the monetary mechanism, the relative wage-rate in the country with the higher absolute cost levels (*i.e.*, the relatively inefficient country) keeps on falling. It will also be noticed that the differences between the money prices in the two countries of the same commodity are gradually wiped out.

The situation is not materially altered if we imagine the two countries as trading a number of commodities. The marginal costs of the collection of export commodities keeps on rising, and the marginal costs of the collection of import commodities keeps on falling, in the two countries. We can 'pair off' export and import commodities, as in Section II. In that case also, the English wage must keep on falling.

IV

The extension of our system to the case where there are other costs besides that of labour presents no great difficulty. International trade comes about, in the last analysis, because of differences in natural endowments. On these natural differences are superimposed certain acquired differences. For instance, as Portugal specializes in wine-production, her labour and capital become adapted to that activity, and her original absolute natural differences as compared with England are reinforced by such acquired differences.

Instead of working with labour units, we have now to work with representative units of combinations of product-

ive factors, *e.g.* and acre of land combined with 100 hours of labour and either a plough or a loom. In that case, the foregoing conclusions as to wage-rates will apply to factor-incomes generally, and the country with lower costs of production will have higher factor-incomes, if the monetary mechanism is to function. As the comparative cost differences are gradually evened out by specialization, the factor-incomes in the country with the higher costs will go on steadily falling, relatively to factor-incomes in the country with lower costs in terms of our composite units of factors of production.

V

We are now in a position to deal with the question of transport costs, and other items in the balance of payments.

Transport costs will, roughly speaking, vary with the quantities exported and imported. We have merely to handle them as an addition to costs, when determining the comparative cost ratios. They make no essential difference to the theory.

As for the other items in the balance of payments, it is obvious that import excesses in them must be counterbalanced, at any rate in the long run, by corresponding excesses in the export commodity balance. For instance, we may conceive of Portugal as importing wine-presses from England. This would be an export of real capital from England. To pay for this, Portugal must export more wine. We may here use the figures of Table 1. If Portugal imports 560 money units worth of machinery from England, she has to balance this debt, sooner or later, by exporting 7 more units of wine, *i.e.*, a total of 112 wine units. Viewed in real terms this merely means that Portugal, by giving up 7 more units of wine to England, acquires machinery which she could have obtained through domestic production only by giving up the production of more than 7 units of wine. This is the *raison d'être* of all the other items of the balance of payments. The proper way to view international trade is as an exchange of goods and services. The items entering

into the trade may be capital goods, services of imported officials, services of hotel guides, or consumption goods. In each of these 'goods' there must be a difference of comparative cost, to make possible an international exchange. There is not the slightest need to draw a distinction between 'Merchandise' and 'Other Items.'

The analysis of Section II would then be applicable, but instead of confining our attention to cost conditions of consumption goods, we would try to widen the scope of our enquiry to include the cost of production of the services of officials, of capital-goods, etc.

VI

So far we have assumed a homogeneous currency system. What happens if we give up this assumption?

We have to start with the simplified model of Table 1. We saw there how equilibrium in the balance of payments was attained with both exports and imports exactly equal to 8400 money units, and how this situation necessitated that the English wage should be 0·84 per hour if the Portuguese wage level was 1·0.

Let us assume that the two currency systems are severed from each other, and that by inflationary methods, the wage structure in England is raised to 1 unit per hour in the depreciated currency, which we will call the £. Let us assume that Portugal also switches over to a paper currency, but that she keeps her price structure stable in terms of her monetary unit, which we will call the Milreis.

In that case, the price of one unit of cloth, in which England has the comparative advantage, will be £100. If Portugal wishes to import 100 units of cloth as before, she has to pay £10,000. In return she exports 105 units of wine, costing altogether 8400 Milreis.

It is obvious that on the foreign exchange market, £10,000 will have to be exchanged against 8400 Milreis, and that a ratio of exchange of £ 1 = 0·84 Milreis will be established. At this exchange-rate, the cloth unit which costs £100 in England will only cost 84 Milreis in Portugal,

and we get the situation as depicted in the following tables:

TABLE 7

Country	Commodity	Labour Cost	Wages	Money-Cost £	Money-Cost M	Quantity Exports	Value Exports £	Value Exports M
1	2	3	4	5	6	7	8	9
England	Cloth	100	1£	100	84	100	10,000	8400
England	Wine	120	1£	120	100·8	...	...	...

TABLE 8

Portugal	Cloth	90	1M	107	90	...	...	...
Portugal	Wine	80	1M	95	80	105	10,000	8400

[*Note*: *Table 7*.

(1), (2), (3) and (4) Assumed.

(5) 3 × 4.

(6) 5 converted into Milreis at the rate of exchange 1 £ 0·84 Milreis.

(7) Assumed.

(8) 5 × 7.

(9) 8 converted into Milreis at the assumed rate of exchange.

Table 8

(1), (2), (3) and (4) Assumed.

(5) 6 converted into £s at rate of exchange 1£ 0·84 Milreis.

(6) 3 × 4.

(7) Assumed.

(8) 9 converted into £s at the assumed rate of exchange.

(9) 6 × 7.]

In other words, although nominal wages are the same in both countries, real wages are lower in England, since the price-level is higher in England in terms of £s than in Portugal in terms of Milreis.

VII

If we assume that one country is trading with a number of countries, we can still work with our model, if we assume that it apportions its exports among its customers, and imports different products in return.

We can now use the analysis of Section II, particularly Tables 4 and 5. In the case analyzed there, it is by no means necessary for the balance of payments in respect of individual pairs of export and import commodities to be equal. Only the *total* of export and import values has to balance.

Similarly, if we think of one country as trading collections of commodities with different countries, it can have an adverse balance of payments with some (import items > export items) and a favourable balance of payments with others (export items>import items). But the total of payments in and payments out should be precisely equal.

It is obvious that this complication by no means affects our conclusion that the income level of the country with absolutely unfavourable conditions of production should be lower, if the benefits of international trade are to be shared.

VIII

In all this there is nothing strange. International trade is rarely, if ever, carried on in terms of barter. We buy a foreigner's good because it costs less in terms of our money than a similar good produced at home. If the foreigner's money and our money are the same, and if we are inefficient in the production of every good as compared with the foreigner, these differences will express themselves as a dearness of all our products as compared with his. If we allow the foreigner to come into our country, he may bring in capital or labour and cheapen the costs in our industries. If, however, we choose to shut out immigration and still want to derive the benefits of international trade, we have to reduce our money-cost structure to an extent such that some at least of our products become worth the foreigner's while to buy, for otherwise we cannot pay for what we buy

from him. If we insist on maintaining a high nominal cost structure, in terms of some paper currency, our currency will depreciate so that our goods become cheaper in terms of the foreigner's currency. International trade is, ultimately, an exchange of goods and services against goods and services, to the mutual benefit of all parties. If the process involves certain changes in relative national wage and income structures, that is no ground for complaining about them. They are merely part of the mechanism of international trade, an essential part, but merely a means to an end—the securing of the gains of international specialization.

A SIMPLIFIED VERSION OF THE TRADE CYCLE THEORY—I

BY

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In the *Treatise on Money* the concept of income was so defined by Keynes as to exclude supernormal profits and losses. On that definition, saving could be said to differ from investment, the difference being measured exactly by the amount of profits or losses, as the case may be. Income is now defined as the net value of output, after deducting user cost. The gross value of the output is made up of factor cost plus user cost plus profit and the net value is made up of factor cost plus profit. We may consider the same thing from the side of expenditure. Aggregate income is necessarily equal to aggregate expenditure; tomorrow's income will not be the same as today's, unless tomorrow's expenditure also is the same as today's. Considered from the side of expenditure, the value of the output is the sum of the expenditure by consumers on consumption goods (Consumption) and that by entrepreneurs on capital goods (Investment). Any reduction in expenditure will therefore mean a reduction in the value of output and therefore in income, a reduction in expenditure by consumers (*i.e.*, an increase in saving) curtailing the income of the entrepreneurs and a reduction in expenditure by entrepreneurs (*i.e.*, a fall

in investment) curtailing the income of consumers. Thus we come back to the proposition so cleverly enunciated by Robertson[1] that any "hitch-up" in the flow of purchasing power towards the purchase of final output is a deflationary force.

When income is defined as the net value of output, saving is necessarily equal to investment. Saving, which is the excess of income over consumption, is merely another aspect of investment which is the excess of the net value of total output over the net value of consumption goods. If consumers save more than before, the sellers of consumption goods receive less than before; the increased savings by one class is offset by losses incurred by another, and the total saving remains unchanged.

In the *Treatise* the disparity between saving and investment was made the "villain of the piece"; but now saving is equal to investment *ex definitione*. The former proposition was based on the assumption that the decisions to save and the decisions to invest are largely taken by different individuals and are governed by entirely different considerations. This assumption however is still not denied; if so, that still indicates a potential source of disturbance. The amount of investment is governed by the "inducement to invest," while the amount of saving by the "propensity to consume." If these two, the inducement to invest and the propensity to consume, are not in equilibrium, there is a disturbance in the economic system. In other words, if at a certain level of income, the amount which entrepreneurs choose to invest is not equal to the amount which people would like to save out of that income, the level of income will be altered in such wise that the amount which people choose to save out of the changed income is equal to the amount which entrepreneurs choose to invest. The result is that while saving is always equal to investment, the

[1] *Economic Journal*, September, 1933. This proposition was further elucidated by Durbin in *The Problem of Credit Policy*.

Cf. my aricle "The Price Level in a Progressive State", *Indian Journal of Economics*, July, 1936.

equilibrium between the amount which people *like* to invest, as determined by the inducement to invest and the amount which people *like* to save, as determined by the propensity to consume, is brought about by a change in income.

The question then arises by how much will the total income have to increase as a result of a given increase in investment? It is obvious from the above reasoning that there will be no equilibrium unless a sufficient amount of voluntary saving is called forth to balance the increase in investment. The question, therefore, resolves to how much the income will have to increase to provide the requisite amount of saving, and the answer obviously depends on how much is saved out of each unit of income. If we know the proportion of each unit of income which is saved, we can just divide the requisite amount of voluntary saving by the proportion and get the number of units that will be added to income in order to provide the required voluntary saving. If x units is the increase in investment, the voluntary saving required is x units. If the propensity to consume is such that one quarter of each unit is saved, the total income will have to increase by $\frac{x}{\frac{1}{4}}$ *i.e.*, 4 x units to provide x units of voluntary saving. This 4 is called the Multiplier (k). It indicates the relation between net investment and total income. In the present example, the marginal propensity to consume is $\frac{3}{4}$ and hence $1 - \frac{3}{4}$ is the proportion of each unit of income that is saved, and $k = \frac{1}{1-\frac{3}{4}}$; we can generalise by saying $k = \frac{1}{1 - \text{marginal propensity to consume}}$. Or, alternatively, the marginal propensity to consume is equal to $1 - \frac{1}{k}$.

The multiplier shows us at once how the position will stand when the equilibrium is established; but it is of the utmost importance to know how the process works itself out from the point when the equilibrium is disturbed to the point when it is re-established. It may be convenient to illustrate it arithmetically.

I	II	III	IV	V	VI	VII	VIII
Period	Income at the beginning of the period.	Voluntary saving on the basis of income at the beginning of the period.	Voluntary consumption on the basis of the income at the beginning of the period.	Actual expenditure on consumption goods during the period.	Expenditure on investment goods during the period.	Actual saving (voluntary saving plus unintentional saving) during the period.	Income at the end of the period (V+VI).
t_0	100	10	90	90	10	10	100
t_1	100	10	90	90	20	(10+10=)20	110
t_2	110	11	99	99	20	(11+9=)20	119
t_3	119	11·9	107 1	107·1	20	(11·9+8·1=)20	127·1
t_4	127 1	12·71	114·1	114·4	20	(12·71+7·3=)20	134·4
t_n	200	20	180	180	20	20	200

At period t_0, there was perfect equilibrium, voluntary saving (III) being equal to voluntary net investment (VI). In t_1, the equilibrium is disturbed, as a result of the entrepreneurs spending 10 more on investment (VI), say out of bank loans. As the consumer's income at the beginning of the period (II) is unchanged at 100, the consumers plan to spend 90 on consumption (IV) and to save 10 (III), on the basis of the existing propensity to consume (90: 100). (It will be observed that throughout the process the propensity to consume is assumed to be unchanged.) The ratios of columns III to II and IV to II are throughout equal to 10: 100 and 90: 100.[2] The consumers' plans with regard to consumption are always realised (V), but not their plans with regard to saving. The increased expenditure on investment by entrepreneurs (VI) means either increased profits

[2] This assumption will be subsequently abandoned. See *infra*.

for producers of investment goods or increased disbursements to primary factors; in either case there is increased income (VIII) (increased expenditure necessarily involves increased income) and as consumption is unchanged at 90 (V), saving, which is the difference between income and consumption, must increase by the amount by which income has increased, *i.e.*, by 10 (VII). Thus, there is unintentional saving of 10 and total saving of 20, which is equal to investment (VI). The new investment may have been originally "financed" by bank loans, but is immediately balanced by actual savings. In t_2, income is higher (II) and hence, on the basis of the propensity to consume (90: 100), voluntary and actual expenditure on consumption goods (IV and V) is 99 (higher than the consumption expenditure in t_1 by 9) and though voluntary savings (III) are 11, actual savings (VII) are 20, the difference being due to unintentional saving of 9 representing the profits made by the sellers of consumption goods. Actual saving is equal to investment. Income has attained a higher level. At each successive stage the unintentional saving diminishes, in t_n, when equilibrium is established, unintentional saving is zero and voluntary saving is equal to investment. The multiplier in t_0 (VI/VIII) was 10, and hence an increase in investment by 10 leads to an increase in income by 10 x 10 = 100 in t_n. It will also be noticed that the adjustment of income to the increase in investment is brought about by an increase in consumption.[3]

When the concept of the multiplier is defined and analysed in this way—which Keynes has not done in his book—several important aspects of it come immediately to light.—

(1) The unintentional savings do appear to be a kind of "forced savings." So, after all, Keynes was not right

[3] The multiplier, therefore, presumes a high elasticity of supply of consumption goods (cf. Hicks, *Economic Journal*, 1936, p. 244). It also assumes away the differences between elasticities of supply in consumption and investment industries. If the differences are great, the investment multiplier will not have the same value as the employment multiplier. Cf. Keynes, *General Theory*, p. 115.

in deriding the idea. It must, however, be noted that the so-called forced saving may take place even without a rise of prices, that there might be unintentional consumption as well as unintentional saving, and that, as the unintentional saving is provided out of increased income, there seems little propriety in calling it forced.

(2) There are passages in *General Theory* which suggest[4] that Keynes was not fully aware of the fact that the process takes time[5]; so that the initial expectations which start the movement may be completely changed before the process is completed. A mechanical application of the multiplier may suggest that an investment of 10 million on public works will increase income by say 40 million (if $k=4$), but it must be remembered that the very process may affect business confidence and expectations and other factors, *for better* or *for worse*, before the 10 million have time to go through the necessary number of revolutions and to increase incomes. The above analysis would show that to achieve every successive increase in voluntary saving and in income, money has necessarily to turn a full circle, which takes time.[6]

The final result, as Professor Bertil Ohlin put it, depends on the relative "speed of secondary reactions."[7]

[4] "The logical theory of the multiplier which holds good continuously, without time-lag at all moments of time" (*General Theory*, p. 122). "In every interval the theory of the multiplier holds good." (p. 123).

[5] Cf. Robertson in *Quarterly Journal of Economics*, November 1936, p. 172-74.

[6] "You don't know how to manage looking-glass cakes. Hand it round first and cut it afterwards." *Through the Looking-glass*, quoted by Robertson, *E. J.*. 1937, p. 428.

[7] Cf. "The effects of a certain primary change varies with the time sequence and the speed of secondary reactions". Prof. Ohlin gives the example of a bumper crop of wheat which may depress prices if it causes wheat producers to curtail their expenditure *sooner than* the expectation of cheapness of raw material causes flour producers or the expectation of cheapness of bread causes consumers to increase their expenditure (*Economic Journal* 1937, p. 66-67). It is necessary to emphasise that it is not merely the speed with which means of payments move but rather the speed of

(This, incidentally, shows that certain phenomena which take time are better analysed by the process method—*i.e.*, by following their working step by step through time—than by the method of expectations which tells us how the equilibrium position will be altered as a result of a change in initial expectations, provided other things remain equal during the transition. The results arrived at by the second method, particularly with regard to practical policy, are likely to be more controversial than those deduced by the first.)[8]

It will, however, be observed from the above table that though the complete process is spread over a long time, quite a substantial increase in income is achieved in the first few revolutions.[9] If the marginal propensity to consume is very high, the immediate increase in incomes will be fairly big, but if the velocity of circulation is very slow, the complete process will take time and may be interrupted, with the result that the final increase in income, *though substantial*, may not be quite as big as the theoretical multiplier (based on the high propensity to consume) may suggest. A high propensity to consume is likely to be associated with a low velocity (in poor agricultural communities) and a low propensity with a high velocity (in rich, industrial communities).

psychological reactions which is the governing factor". The reactions of purchases depends e.g. on (1) the speed with which profit and other income expectations are affected; (2) the speed with which (a) amounts of cash in different hands are changed and (b) the willingness of credit institutions to give credit is affected; and (3) the actual cash and credit position when the primary change occurs." (*E. J.* 1937, p. 68).

8 Dr. Hicks referring to the method of expectations, observes: "The change in actual production during the first period will influence expectations ruling at the end of that period; and there is no means of telling what that influence will be. There is a danger when it is applied to long periods of the whole method petering out." But he qualifies his remarks by saying: "But this generally means that there is a psychological unknown affecting the magnitude of the impact effect." (*E. J.* 1936, p. 241).

9 Cf. Mr. Keynes' article on "The Multiplier" in the *New Statesman*, 1933.

Another important point arising out of the above table is the equality between saving and investment. Mr. Keynes' proposition in the *Treatise* that the equality between saving and investment is the sign of equilibrium and a divergence is a source of disequilibrium, gave rise to a controversy which continued till the appearance of the *General Theory*. It was argued by his critics that saving and investment are necessarily equal even in the worst state of disequilibrium. The above table would show that it is so. Columns VI and VII are throughout equal, not merely in t_0 and t_n when there is equilibrium, but also at all intervening stages of the transition. But it must be remembered that this table is based on a different definition of income, that which includes supernormal profit, while the definition in the *Treatise* excluded profits. The critics of Mr. Keynes blundered in not seeing the difference between the two definitions, while Mr. Keynes' mistake lay in not describing the process properly. In *General Theory* Mr. Keynes changed over to the other definition of income (that including profits) and admitted the equality between saving and investment, but again failed to describe the process properly, so that his statements in the *General Theory*[10] such as "When investment changes, income must necessarily change in just that degree which is necessary to make the change in saving equal to the change in investment," or "the effort of the public to consume a part of their increased incomes will stimulate output until the new level of incomes provides a margin of saving sufficient to correspond to the increased investment" are again the subject of controversy. If saving and investment are necessarily equal (and it appears on examination that the equality continues throughout the process of transition) where is the sense, the critics ask, in saying that incomes must change in order to make "the change in saving equal to the change in investment?"[11] In the *General Theory*, Mr. Keynes again failed to describe the exact process involved and also to stick consistently to one definition of saving, so that the critics were again puzzled.

[10] P. 184.

[11] Cf. Robertson, *E. J.* 1937, p. 429.

If a simple arithmetical description of events such as is given in the above table had been used, a good deal of controversy would have been saved. It was similar to the quarrel between two knights not being able to see the other side of the shield.

When Mr. Keynes says (in *General Theory*) that incomes must change so as to equalise saving with investment, he is using the term "saving" in the sense of voluntary or active saving; while when he says "saving is always equal to investment"[12] he is using the term in the sense of aggregate saving (active plus unintentional). Both are true, but the phrase "saving is always equal to investment" conceals the real cause of the trouble; although aggregate saving is always equal to aggregate investment, voluntary saving is not always equal to voluntary investment and the equilibrium is established only when unintentional saving and investment are reduced to nil and *voluntary saving becomes equal to voluntary investment.*[13] The failure to emphasise this equilibrium between voluntary saving and voluntary investment (and the undue emphasis on the equality between aggregate saving and aggregate investment which holds always and without time-lag) was the most vital defect of the *General Theory.*[14]

Column III in the table above shows voluntary saving, column VI shows voluntary investment. The difference between the two shown separately in column VII is the un-

[12] *General Theory*, pp. 61-65.

[13] Throughout this paper the terms "voluntary" saving and "active" saving are used in the same sense. "Active saving" is Mr. Hawtrey's term. (*Capital and Employment*, p. 176-80). Mr. Hawtrey's terminology makes no distinction between spontaneous and induced changes which are grouped together in one term "active".

[14] Prof. Bertil Ohlin stresses the same point by emphasising the distinction between *ex-ante* and *ex-post* concepts. *Ex-ante* is anticipated, while *ex-post* is realised. *Ex-post* saving is necessarily equal to *ex-post* investment, but *ex-ante* saving need not be equal to *ex-ante* investment; and the difference is the cause of fluctuations. (cf. "Some Notes on the Stockholm Theory of Savings and Investment," *Economic Journal*, March and June, 1937.)

intentional saving which is equal to the increase in consumption (see cols. IV and V) and the consequent increase in the profits of consumption producers.

We have so far referred only to unintentional savings. But there might be unintentional investment also. (Please refer to table above). If the increase in the demand for consumption goods in t_2 from 90 to 99 is met out of stocks, there is unintentional disinvestment of 9 and our figure for net investment in col. VI has to be corrected to $20-9=11$. The total income will be 99 (consumption expenditure) $+11$ (net investment) $=110$, and actual saving $(110-99)$ will be equal to voluntary saving. The further movement of output and incomes will be due to unintentional disinvestment instead of unintentional saving which is nil. There might also be an induced increase in investment in the process, because the sellers of consumption goods while replenishing the stocks may actually increase them (by buying more for stocks than they have taken out of them) in view of the increased turnover. This induced increase of whatever magnitude will be added to the spontaneous increase of 10 in investment which had taken place before in (t_1) and the total income, when the equilibrium is reached, will be higher than 200.

The rise in income during the process of transition may not proceed at a uniform rate but may show a discontinuous trend on account of the possibility of unintentional and induced investment. It would appear, moreover, that for a complete explanation of the phenomena, we have to distinguish between three kinds of saving and three kinds of investment, *spontaneous*, *unintentional* (*or automatic*) *and induced*. A change in saving which is due to a change in the propensity to consume is spontaneous, while a change which takes place in response to a change in income is induced (Col. III). Spontaneous changes in investment come about due to changes in the inducement to invest, while induced changes depend on fluctuations in the demand for consumption goods. Unintentional or automatic saving (Col. VII) and investment have already been explained.

For the sake of completeness, it may also be observed here that the assumption made earlier that the propensity

to consume remains unchanged throughout the process may not be valid under all circumstances. If there is a change in propensity, the value of the multiplier and the total income in the final position of equilibrium may be larger or smaller than the assumption of a constant propensity would indicate.[15]

We have so far been discussing fluctuations in income in response to an assumed change in investment. We may now consider the inducement to invest. To use again Mr. Keynes's terminology, the inducement to investment depends on the relation between the marginal efficiency of capital and the rate of interest. The marginal efficiency is not the same thing as the marginal productivity, but it may be convenient to explain it by an analogy with the latter. If we assume that the supply price of an instrument which lasts for four years is 100, its annual gross yield 30 and the total gross yield for four years 120, its productivity is equal to the rate of discount per year, *viz.*, 5, which equalises the total gross yield with the supply price. The productivity may also be calculated in another way—as the instrument lasts for four years, its depreciation per year may be taken to be 25 and as the gross yield is 30, the net yield (ignoring the maintenance cost for the moment) which measures the productivity is 5. The production of an instrument will not be profitable unless the current rate of interest exceeds the net yield expected from it. As different instruments have different yields, their production depends on the existence of appropriate rates of interest and we can, therefore, form a schedule showing the amount of investment that will be forthcoming at different rates of interest. Fluctuations in investment will, therefore, depend on changes in marginal productivity on the one hand and on the changes in the rate of interest on the other.

But this is rather a simplified account of the matter. The marginal efficiency is not the same thing as marginal productivity, because while the latter is in some way associated in its classical connotation with the value of the physical yield, the former is governed by expectations of

[15] This assumption is further discussed on p. 49 *infra*.

profit and is, therefore, much more volatile. It depends on what Mr. Keynes calls the state of long-term expectation and is influenced by all kinds of passing events or even the rumours of such events, while each individual's action so far as it relates to risk-bearing investments is governed not by what he himself expects the future to be, but what he expects the generality of people would expect the future to be. It depends on each individual's expectation regarding the public's expectations. To justify any particular level of investment its marginal efficiency so determined must at least be equal to the current rate of interest.

Mr. Keynes's doctrine of the rate of interest is the most revolutionary part of his theory. Once it is proved that aggregate saving and aggregate investment are necessarily equal, the old theory that the rate of interest equates the demand for capital with the supply of capital falls to the ground. It is true that a rise in the rate of interest would cause a larger proportion of a given income to be saved, but it would also cause a reduction in investment; and, therefore, a reduction in income. A rise in the rate would, therefore, lead both to lower saving and lower investment. Nor is it possible to argue that the rate of interest is determined by the marginal yield of investment; because that involves circular reasoning. The marginal yield depends on the existing scale of investment, but investment would not have been on the present scale unless the rate of interest was equal to the marginal yield. Thus, the theory amounts to this—The rate of interest is what it is because the investment is what it is, but investment is what it is, because the rate of interest is what it is. This is clearly circular reasoning.

If the marginal yield is assumed to govern the rate of interest, there is no limit to which investment may proceed. The classical theory that the supply price of saving will, at some stage, rise above the demand price and will check further investment does not help, because every increment of investment brings about an increment of income and an appropriate increment of saving. Whatever level of interest stimulates or retards investment will also stimulate or retard saving to exactly the same extent. If the rate of interest simply measures the marginal yield, it must fall as the

marginal yield falls and will thus exercise no check on investment, which will proceed without limit.

In actual practice, investment does not proceed without limit, but is checked by the rate of interest. There must, clearly, therefore, be some factor, other than either the marginal yield or the imaginary shortage of saving, which determines the rate of interest and keeps investment in equilibrium. Mr. Keynes suggests that it is the liquidity preference on money which prevents the rate of interest from falling. Rate of interest is essentially a price for the use of money. Money is not merely a medium of exchange but also a store of value. People can hold their resources not merely in the form of interest-bearing investments, but also in the form of money; and although hoarded money yields no interest, hoarding also has its compensation in the form of liquidity. Liquidity, up to a certain point, is no doubt a definite advantage, partly because it is convenient for various obvious reasons to have sufficient cash in hand to meet cash expenditure, and partly because we do not know the future clearly. Even if we do not have to spend the money, there may be more profitable opportunities for investing it in future than there are at present. Mr. Keynes calls the last motive speculative motive, while the other motives for holding money are grouped together as transaction motives. By reason of these various motives liquidity, as said above, is a definite advantage, but at the same time liquidity entails a sacrifice of interest. On account of this sacrifice involved, the desire to hold resources in the form of money cannot be equally strong for all people. Desire or no desire, some money will be held, for reasons of convenience in business; this amount depends on the level of income or activity $[M_1 = L_1 (Y)]$; but money held in excess of this amount is held out of purely speculative motives and entails an avoidable loss of interest. Opinions will differ as to whether it is any advantage at all to hold resources in the form of money for speculative reasons.[16] The decision depends mostly on

[16] Only those who are *uncertain* about the future rate of interest will hold resources in cash. So long as the net rate of inter-

what each individual thinks about the future rate of interest. Those who think that the future rate of interest is going to be sufficiently higher than the present rate to compensate for the loss involved in hoarding money till the expected rise in the rate, will hoard it, while those who think otherwise will lend it. Thus the demand for hoarding is a variable factor and varies with interest $[M_2 = L_2\ (r)]$; but the supply of money is fixed, so far as private individuals are concerned and the supply available for hoarding is limited.

As said above, opinions are always divided as to whether one should hoard or not; if at any particular rate of interest, the division of opinion is such that the amount of money which people like to hoard is greater than the supply available, the rate of interest must rise so as to change the division of opinion and turn some of the former hoarders into non-hoarders in such a way that the amount of money required to satisfy the hoarders is no more than the supply of money available after satisfying the needs of business or needs arising out of non-speculative motives.[17] This is how the rate of interest is determined; it is a measure of the public's liquidity preference, and as the amount of money required for transaction purposes depends on the level of income and activity, it is particularly a measure of that part of liquidity preference which arises out of the speculative motive. The rate of interest is a reward for not hoarding, *i.e.*, it is a mechanism for restricting the hoarding desire of the people to an amount not exceeding the quantity of money available for the purpose.

It may be worth while to analyse the idea of liquidity preference arising out of the speculative motive a little further. Every rise in the rate of interest involves a fall in the price of long-dated securities. A man lending his

est is positive, holding resources in cash does involve sacrifice, so that the uncertainty about the future rate is the only conceivable reason for holding wealth in the form of cash. (*General Theory*, pp. 168-69, 201-02).

[17] Cf. Mr. Keynes's analysis of the same phenomena in terms of a division of opinion between "bulls' and "bears" in the *Treatise on Money*, Vol. I, pp. 248-57.

money on long term at the present rate of interest runs, therefore, the risk of a certain loss of capital if the rate of interest rises before the debt becomes due. Of course, the current yield of the loan is available to compensate the lender for the loss of capital. If according to the expectation of the lender the interest earned on the loan up to the time when the rate rises is sufficient to cover the expected loss of capital, he will lend his money; otherwise he will hoard it. Thus, the decision depends on what he expects the future rate to be and whether the present rate is high enough to compensate him for the loss arising from his expectation coming true. If, his expectation regarding the future rate remaining unchanged, the current rate falls, his desire to hoard will increase. Contrarily, if the current rate rises, his desire to hoard will decrease. The same results will come about by a revision in his idea regarding the safe rate, even if there is no change in the current rate of interest. There is a limit to the extent to which the current rate can diverge from our idea of the safe rate without necessitating hoarding. If the rate of interest on a long-term debt is 4 per cent, it is preferable to sacrifice liquidity unless on a balance of probabilities it is feared that the long-term rate of interest may rise faster than by 4 per cent of itself per annum, *i.e.*, by an amount greater than 0.16 per cent. per annum. If the rate is already so low as 2 per cent., the limit to which it can rise without causing capital loss is only by .04 per cent. per annum. If the rate of interest which an individual expects to prevail a year hence is higher than the present rate of 2 per cent by an amount greater than 0.04, there is a positive inducement to keep money idle for a year.[18] As Keynes puts it, "A

[18] Mr. Hawtrey expresses the same thing a little more accurately. "With a rate of interest of r per unit (or 100 r per cent) x years' interest will be sufficient to offset a fall in capital value from 1/r years' purchase to 1/r-n. The limiting rate of interest after x years is therefore $\frac{r}{1-rn}$ per unit." (Capital and Employment, p. 190). To put the same thing differently, the permissible increase in the rate is $\frac{r^2 n}{1-rn}$.

long-term rate of interest of (say) 2 per cent leaves more to fear than to hope and offers a running yield which is only sufficient to offset a very small measure of fear". Thus, the liquidity preference arising out of people's ideas about the future sets a limit to the fall in the rate of interest.

It has been stated above that the amount of investment forthcoming at any particular time depends on the relation between the marginal efficiency of capital and the rate of interest. The marginal efficiency is governed very largely by the state of long-term expectation while the rate of interest by the speculative motives of the investors. Thus, investment is largely a resultant of the business psychology and the psychology of the investors; in other words, it is governed more by irrational forces than by calculation of marginal productivity or the choice between deferred consumption and present consumption.[19] If investment is to increase, either the marginal efficiency must rise or the liquidity preference must fall. If there is no change in either, the quantity of money must be increased to make the rate of interest fall on the basis of the existing schedule of liquidity preference.

Thus an increase in investment depends on the marginal efficiency of capital, the liquidity preference schedule and the quantity of money. As already stated, the increase in income which results from a given increase in investment depends on the propensity to consume. Thus, there are four factors governing an increase in income—marginal efficiency of capital, liquidity preference, quantity of money and the marginal propensity to consume.

Mr. Keynes has shown that the reason why it is the rate of interest on money which sets a limit to the profitable production of capital assets is to be found in certain essential properties of money. These properties are mainly two:—

(1) That there is a gain from holding money in the form of the liquidity preference attaching to it, and

[19] Cf. Keynes in *Quarterly Journal of Economics*, February. 1937, p. 218.

(2) That this gain tends to be inelastic due to the fixity of the quantity of money.

On the other hand, the gain from holding other assets tends to fall as their supply increases. As the gain from holding assets cannot differ from the gain from holding money, the inelasticity of the latter sets a limit to an increase in the supply of other assets. Every commodity or asset which is held over a period of time has a rate of interest, (which Mr. Keynes calls the own rate) which is equal to the yield of the commodity over the period *plus* any liquidity preference which attaches to it by reason of any convenience or security its possession gives to its holder, *minus* its carrying cost over the period. These three attributes may be called q, l and $-c$, respectively. The sum total of the three attributes measures the gain to be derived from holding each asset and although q, l and $-c$ may differ from one asset to another, the net gain, $q+l-c$, must be equal in each case. If in the case of any assets, $q+l-c$ works out to a higher figure than in the case of others, the investment in that asset will increase, so that $q+l$ will fall and c will increase making $q+l-c$ again equal to that in other cases.

Different assets possess these attributes in varying degree; the gain from holding a fixed asset, *e.g.*, a house, consists only in its yield q, (l and c being negligible) the gain from holding a commodity is mostly negative consisting in its carrying cost, $-c$, (q and l being negligible[20]) while the gain from holding money is its liquidity preference, l, (q and $-c$ being negligible). In the case of these three main types of assests, therefore, the condition that $q+l-c$ must be equal in each case comes to this that q of fixed assets $= -c$ of liquid stocks $= l$ of money. Since our resources are in the form of money, any possible appreciation of other assets in terms of money must be added to the gain derived from holding them. If a_1 is the appreciation

[20] After the requirements of certain minimum stocks are satisfied, the liquidity preference falls to pero. This view is supported by Harrod and criticised by Hawtrey.

of houses, and a_2 of stocks, $a_1+q=a_2-c=l$. a_1+q and a_2-c may be called the own rates of money interest.

Now, another important property of money is that its supply is inelastic, while the supply of other assets is relatively elastic. As the supply of other assets increases q falls and $-c$ increases, but as the supply of money does not increase, l does not fall. If, therefore, the condition $a_1+q=a_2-c=l$ is to be satisfied, a_1, a_2 (the degree of expected appreciation) must rise; that is, the present price of capital assets must fall in relation to their future price; but the present price cannot fall below the present supply price; thus, unless l falls, the profitable production of all other assets will come to an end at a certain stage. The conclusion is that it is the own rate of interest on money itself which sets a limit to the investment in other types of assets.

Thus, it is not the rate of interest which has to adjust itself to the marginal efficiency, but the marginal efficiency to the rate. The classifical economists had overlooked the fact that resources can be held in the form of money, not necessarily in the form of capital assets. If the gain to be derived from holding money is greater than the gain to be derived from holding other assets, only money will be held. And the gain derived from money tends to be inelastic, due to the fixity of the quantity of money; the gain from holding other assets has, therefore, to attain equality with the gain from holding money through an adjustment of the investment in other assets.

Returning to the four determinants of national income mentioned above, the lower the rate of interest, the higher the investment, and the higher the marginal propensity to consume, the greater is the income corresponding to the investment. It is now clear from the discussion of the previous paragraphs, that the increase in investment may sometimes become impossible due to the failure of the interest rate to fall to a sufficiently low level. In a rich community the marginal yield of investment is naturally low; unless, therefore, the interest rate falls to a low enough level, further investment is impossible. It may be difficult for example to reduce the rate on long-term securities below 2 per cent. This, therefore, is the first obstacle in the way of

an increase in income. But there is another and a more serious one, namely, that as income increases, the propensity to consume declines. People save a higher proportion of a higher income. Thus, a higher investment is required to produce a given income. If at any level of income, the amount which people choose to save is greater than the amount which is being concurrently invested by entrepreneurs, that level of income cannot be maintained; the excess saving will act as a deflationery force and the income will be reduced to a level at which voluntary saving becomes equal to voluntary investment. The increase in saving (*i.e.*, the diminished propensity to consume) which takes place in times of prosperity is due to the shift to profit which accompanies an expansion of output under conditions of diminishing returns.

Thus, the stickiness of the rate of interest at a certain level combined with the tendency of saving to increase with increasing income and output are the two main obstacles to the attainment of full employment. To these may be added the irrational waves of psychology which affect the marginal efficiency of capital and changing opinions about the future which determine the state of liquidity preference. It, thus, appears to be well-nigh impossible for a rich community, except by an accidental coincidence of circumstances, to maintain a state of full employment or even a steady level of output and income.

THE CONTROL OF SOIL EROSION IN THE WEST—AND ITS LESSONS FOR INDIA.[1]

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Introductory

In a separate paper,[2] I have discussed the economics of soil erosion—its nature and extent, its principal causes and its capital evils. I now turn to the methods of control usually adopted in the West and discuss how far they can be applied to India.

Necessity of Educating the Farmer

The problem before us is to make the soil stay at home. For that, the very first thing to do is to educate our farmers. We must tell him all that is worth knowing about erosion and its causes, its nature and extent and the remedies that might be adopted. We must awaken the agricultural conscience of the country by active propaganda.[3] We have lost millions by erosion and those lost millions have to be recovered. Conservation must be taught in schools, colleges and Universities, in markets, fairs and farms. Every farmer must be made intelligently conscious of the serious dangers of erosion so that conservation might become an individual responsibility. The good farmer is one who will farm as well as build his soil. The poor farmer is one

[1] Paper contributed to the 27th Indian Science Congress, Madras. January, 1940.

[2] Cf. "The Economics of Soil Erosion and its influence on National Life" in the *Indian Journal of Economics*, October, 1940.

[3] *Report of the Committee on Soil Erosion in Ceylon*, 1931.

who merely mines the soil. Demonstration farms and erosion centres must de started throughout the country to wake up the sleeping farmers. A short training in agricultural economics, forestry, soil conservation and agricultural chemistry for our farmers would be very valuable though its cost would be very high. For all this, we need co-operative effort and intelligent leadership.

Tenancy Conditions

A stable tenancy is a *sine qua non* because there would be no chance of erosion control unless tenants have a real security of tenure. The renting of land on short leases can only lead to an abuse or misuse of land. The main responsibility for preventing erosion must rest on individual owners. It is idle to expect that the state shall be responsible for each individual farm. Yet, no man can be expected to do his best for the farm unless it is for the permanent benefit of himself or his heirs. Security of tenure and the continuity of the family farm are essential in all schemes of soil conservation and erosion control.

Stipulations relating to erosion control are now suggested in all future land leases. America has gone a step further by inserting such stipulations in loan contracts as well. Since 1927, the Federal Land Bank at Houston, Texas, and later on, other Federal Land Banks, whenever they grant loans, put in a clause in loan agreement which requires the owner to protect his fields by adequate terracing wherever and whenever it is found necessary. The Banks themselves provide experts in conservation who give every help and advice to the farmers in terrace building. All banks in the U.S.A. have been asked to co-operate in the effort to keep the soils at home.

Importance of Research

Expert scientific enquiry would be very necessary and valuable to formulate a co-ordinated plan of action. The collection of accurate data relating to erosion for the whole of India is urgently needed. For this purpose, a soil erosion survey would be necessary for each local area

by special experts. The science of soil conservation is still in its infancy, and hence organised and continued scientific research is essential. The anti-erosion methods of other countries must be carefully studied and tested to find out which of them will best suit a particular locality. In India, our experience in soil erosion is too limited yet to let us dogmatise on it. The best methods of erosion control to be adopted, the type of vegetation to be encouraged, the best methods of crop rotation to keep down the erosion potential—all these need careful research and enquiry. Crops have to be carefully classified for each local area into soil-building and soil-depleting crops[4] and informations about them have to be widely circulated amongst the cultivators. Expert and authoritative informations about control methods should be published in vernaculars for the benefit of tenants and landlords. The proper grading of terraces for different soils and slopes, the fall between terraces for different slopes—all these need careful investigation. The problem of control will vary from place to place according to soil, slope vegetation and rainfall. Exchange of information between different centres of research at home and abroad will help to prevent waste of entrgy and money inevitable in unrelated efforts, economise time and expenditure and provide greater unity of action. The engineer, the agriculturist, the economist and the scientist will understand each other better and more fully by joint and united efforts than by individual and unrelated efforts. Piece-meal planning is no good. The American Universities—*e.g.* Wisconsin, Georgia, Missouri, Nevada, Columbia, Cornell, Michigan—all these and more—are co-operating in erosion research and they offer adequate facilities for the study of conservation problem.

State Assistance

In the solution of this vast national problem, the State cannot afford to be merely an indifferent spectator. No

[4] See *Transactions, Third International Congress of Soil Science*, Oxford, 1935.

expenditure can be too large for it. Whatever may be spent for the purpose would, in the end, be a real economy. It would be really spending to save. The efforts of the American Government in this direction are really wonderful. The Federal Government established the Soil Conservation Service—a federal service—in April, 1935 and it spends millions of dollars every year to finance the conservation schemes. The S.C.S. programme involves more than half a billion acres of land and millions of dollars in investments. In has built a network of erosion stations where research in erosion problem is continuously carried on. The best methods of control are widely demonstrated. It itself undertakes control measures on large watersheds. It educates public opinion by lectures, demonstrations, publicity campaigns, pamphlets and leaflets *etc.* In addition, there are 221 Civilian Conservation Corps (shortly called, the C.C.C.) which enrolled about 300,000 young men—trained by army officers—for work on soil conservation, re-afforestation and fire-fighting. All these have done very valuable work. The T.V.A. (Tennessee Valley Authority) and the Re-settlement Administration also are engaged in similar work. In addition, a programme of domestic allotment was also formulated in 1936. A Soil Conservation Act was passed under which the American farmer gets cash payments for participating in the conservation plan and programme in his own farm. Under the A.A.A.[5], 120 million dollars are provided to benefit the farmers in the Middle West who co-operate in conservation practices.

Like the state, the railways also ought to be vitally interested in erosion control because every heavy flood causes serious damage to their railway lines and bridges. The St. Louis South Western Railway in the U.S.A. conducts terracing schools with illustrated lectures followed by field demonstrations.

[5] Agricultural Adjustment Administration (shortly called the Triple A).

Re-afforestation

Re-afforestation and the protection of forests are vital in all erosion control. Forests attract rainfall, moderate extremes of temperature, check erosion by wind, increase humidity, conserve the water supply for natural springs and reservoirs and regulate the flow of rivers and streams. To rule the river, you must rule the mountain. "Paint your hills green" is the new slogan in America. The problem is vast but we have to make a start. The more we delay, the more serious will the problem become. We really cannot afford to drift. In America, they give bounties on tree planting and they encourage arbor days. Cash benefits are awarded or relief in taxation is given for the re-afforestation of steep slopes and hillsides. The lack of adequate fire protection methods is a serious danger. Fire-fighting methods must be improved and modernised so as to afford real protection of forests from fires. Compulsory re-afforestation of eroded areas and of waste and idle spaces may also be introduced. Continuous sodding is a great preventive of erosion. The provision of grassed waterways and sod pavements to carry the water binds the soil and checks erosion. The re-seeding of former grass lands is necessary. Planting of trees round lakes, reservoirs and storage basins to prevent erosion from surrounding farms being washed down and silting them up is greatly desirable.

Improved system of farming

Erosion may also be controlled by scientific methods of farming. If the rain-water flow can be slowed down, if its velocity can be reduced, it will thereby reduce the volume of silt that is washed down. More soil will be held on the land, the water-carrying capacity of the rivers will be increased and the violence of the floods will be moderated. A wide adoption of conservation farming practices would contribute largely to control erosion and prevent or moderate floods. To control erosion effectively, the cropping system must provide for a cover of growing vegetation as long as possible during the rains. It must also supply organic matter to the soils. Deep ploughing will increase the

absorptive power of the soil and thereby reduce soil-wash. Soils charged with organic matter do not wash or flow as badly as soils that contain poor quantities of them. Decaying organic matter—called humus—stabilises the material and enables one particle of soil to adhere firmly to another. Humus further prevents wind and water erosion by increasing the water-holding capacity of the soil and by improving its mechanical condition. The soil is opened out making aeration and penetration by roots easier. Heavier soils become more porous. Thereby they are able to store more water. Loss of humus will change the physical structure of the soil. Wind erosion can be controlled by use of fibrous-rooted grasses in long-time rotations. Soil loss is avoided by tilling with implements which will leave the surface of the soil cloddy and properly mixed with crop residues. If these clods are crushed and destroyed it would result in greater loss of soil. We must also return to the land all crop refuse—such as stalks, stubbles, and manures. Since erosion depends on velocity of water, it would be best to equip the eroding soil with a surface tough enough to resist scouring. In many parts of America, it is now thought highly desirable that farming and live-stock economy should be made entirely dependent on grass and legumes.[6] There must be a proper balance between soil-building and soil-depleting crops in order to ensure the productivity of the farms. Soil conservation is the key to a permanent agricultural system. What is urgently wanted is a system of agriculture that will live on the hills and let the hills live as well.

Contour Strip Cropping

Contour strip-cropping is now widely adopted as an effective method of erosion control in the West. Strip-cropping is cropping in straight parallel strips laid out crosswise to the direction of the prevailing winds. It gives an excellent protection until it is possible to terrace the land. It is both simple and economical. There are many types of

[6] Wallace, *Farmer*, 60, 4-9 (July 20, 1935).

strip-cropping. Contour strip-cropping—in proper rotation *i.e.*, alternating strips of clean-tilled crops (*e.g.*, cotton or corn) with similar strips of close ahd densely growing or fibrous-rooted crops (*e.g.*, small grains, legumes and grasses) along the contours of erosive slopes is a valuable aid in soil and water conservation. It slows down the velocity of water and enables more of it to enter into the soil, where it is stored for future use. It thus reduces soil and water wastage. If a sloping field is ploughed, planted and cultivated around on the contour level—instead of up and down the slope—each row and plough furrow obstructs the downward flow of water, impedes its velocity and reduces the amount of silt that is washed down. On the other hand, if the land is tilled up and down the slope, the rows and plough furrows help soil and water losses greatly. "They become man-made channels for the concentration and the rapid run-off of the water. Contour furrows hold water, while the trees are growing. The moisture they catch may mean, on dry lands, the difference between success and failure."[7]

Strip-cropping has made hill sides and slopy lands more productive. It preserves terrace lines until it is possible to construct the terraces.

Under certain conditions, where the land is gently sloping or where rain-fall is light, strip-cropping may be a substitute for terracing.[8] Contouring, besides conserving moisture largely, solves wind erosion problems. It saves humus in soil and therefore its fertility. It also conserves tractor and horse-power.

Contour trenching has recently been practised in India—especially in the Punjab. In the Hoshiarpur district it is widely applied. "The less precipitous slopes are marked out in a system of trenches. Each section is kept dead level along the contour so as to catch the maximum of water. In average hill-side conditions a trench, 10 feet long and $1\frac{1}{2}$ feet broad and deep, sloped upto a much wider top width

[7] *Soil and Water Conservation in the Pacific North West* (Bulletin No. 1773, U.S.A. Dept. of Agriculture, p. 22).

[8] *Strip-Cropping.* U.S.A. (Dept. of Agr.), No. 85, 1931,

costs 2 annas and will hold about a ton of water (25 gallons). Its net effect over a catchment area of 200 acres is to prevent flooding in the stream-bed.[9] It is best to prevent hill-side wash. The digging of contour drains and silt pits (or sponge pits) as in Java or Indo-China, and ridges on the contour may also be tried. They have proved valuable in other countries and will do the same in India as well.

Terrace Cultivation

Terracing is another effective method for soil and water conservation. The terracing on hill-sides and sloping areas provides a mechanical control of erosion. It slows down and holds the water which would otherwise flow down with increasing velocity. It thus holds back the soil. There are two principal types of it in America, *viz.*, the bench and the ridge, and each type has its advantages. Broad-based and graded terraces are most effective. With an adequate vegetative cover they will reduce soil-wash and water losses considerably. Terracing will increase the output of the soil by increasing the depth of water penetration and thereby conserving the moisture in it. Water evaporation on terraced lands is much less than on unterraced lands and the resulting conservation of water is a potent factor in the control of wind erosion. The Mangum terraces in Carolina and Georgia have proved very useful. Power terracing machines are provided by the state and let out to farmers in many places. Home-made tools are also largely used for the purpose.

In the Philippines, terracing has been carried on with great success by the Igorots who—"with no tool save a stick and with no power save that of the arms and the legs" have converted whole mountains into giant flights of level spaces and have provided splendid means to irrigate them.[10] Their rice terraces followed every curve of the mountain side and

[9] "Tackling the Soil Erosion Problem"—by R. M. Gorrie, D. Sc. (*Statesman*, Sept. 10 1939).

[10] *Scientific American*, March 16, 1918.

they have replaced the old vertical hill-side vegetation by horizontol farming. In Ceylon, terraces are given a definite reverse slope against the hill instead of being level.[11] In some states in South India, the terracing system of Java is slightly modified. The forking and clean weeding of steep slopes are abandoned and the soil is kept covered all the time by some selected weed. This saves the terraces from being washed down by heavy monsoon rains.[12] Compulsory terracing has been adopted in many countries. It has not been adopted, so far, in India although Howard in 1914 suggested it in the case of all lands from which the forest canopy has been removed.[13]

Cover Crops and Rotation

Planting contour hedges of leguminous plants would also be valuable as they help to bind the soil. In America, alfalfa planted on the contours reduced wastage of water and soil. Sorghum or oats are good resistants to erosion. Round about the city of New York they have planted conifers to serve a double purpose, *viz.*, as a soil binder to prevent erosion as also to make a pleasing landscape.

The cultivation of leguminous cover crops or green manuring crops to decrease the velocity of the surface flow is the first line of defence in erosion control in most countries. It prevents or moderates sheet erosion. A low ground cover protects the soil from the direct impact of the rain, increases the absorptive capacity of the soil and binds it firmly together. Floods will become less frequent and less destructive when the denuded watersheds are protected by a vegetation cover. It is necessary to investigate which of the various indigenous crops would be the best cover crop for any particular or local area. Creeping or prostrate plants would be generally better than others. The crop

[11] Denham. *Some Practical Notes on the Prevention of Soil Erosion*, 1926.

[12] *Agri. J. of India* (April, 1916, p. 134-41 and Oct., 1919, p. 787-90).

[13] *Quarterly Journal*, Indian Tea Association, Part I (1914), p. 24-30.

selected must be best suited to the soil, climate, farm needs and marketing facilities. The best cover crops tested and selected for the different parts of America are lespedeza, barley, vetch, wheat, mustard, rye, cowpeas, pigeon-peas, jack beans, sword beans, velvet beans, clover, timothy, rape, lupine, alfalfa, blue grass, legumes, cereals and other green manuring crops.

Proper rotation of crops is necessary to increase the humus and to adapt the crop to the soil. It will also provide an effective vegetation cover throughout the year and thus it will help to build up the soil again.

Check Dams and Gullies

Check dams have also proved effective for preventing soil and water losses.[14] They give water more time to soak into the soil, prevent the growth of gullies and conserve the water supply. By retarding the flow, they check erosion. Dams of stone or stone and wire at the head-waters are valuable. Dams and weirs provided with aprons are made in Germany. Dikes or flat ditches are used in Carolina. Diversion ditches are also used to control run-off during and after the rains.

Gullies must be checked and reclaimed. Dynamite has been used in many places to blast the gully banks with great success. Gully control by planting trees etc. is common. Black locust, Bermuda grass, honey-suckle vine *etc.* are specially recommended[15] for planting in the beds and banks of small gullies in order to aid soil-binding. Gully plugging has been recently attempted in the Punjab by a series of small check dams. They are made of stones or brush and logs, straw or woven wire, and the object of plugging is to delay the silt-laden flood and hold back the detritus until plant-growth can fix it firmly. As soon as soil, say one foot deep, is trapped the area is planted up with anything that will take root quickly. The plant select-

[14] Soil Erosion Conference, Pretoria, 1929.

[15] *Amer. Forestry*, Dec. 1917. Vide also *Soil Conservation Practices, (U.S.S.C.S.) Handbook*, 1936.

ed varies from place to place. In the Punjab, Japlota, tohr, keora, willow bamboo, nara, banha and bhabbar have been used with success. "If this work is done in the head of each small *nala*, a large percentage of even the heaviest storms sinks into the sub-soil emerging weeks later in rejuvenated springs . . . . . . In the case of bigger rivers, a different technique is required. One cannot force a big torrent into obedience. It has to be humoured rather than bullied by massive dams . . . . . If a series of *Banha* hedges is put at a slight angle to the force of the torrent, they will act as tooth-combs to rob the torrent of some of its force and of its silt which is deposited between and behind the hedges.[16] The filling of ditches with straw for catching and holding the soil flow is common in India. In America, large gullies are often converted into farm wood lots to serve the double purpose of checking further destruction of land and also giving a supply of farm timber in the least valuable part of the farm.

Liming of soil also controls erosion. It is an important factor in soil conservation.[17] In soils where acidity is high enough to jeopardise the success of a crop, it is valuable. The liming of soil pays not only in increased crop yield but also in the restriction of top-soil erosion.

Control and Conservation of Wild life

The control of over-grazing and the improvement of grass lands are urgently called for. Proper grazing practices should be encouraged. In Texas, payment is made for deferred grazing. By this means, a portion of the ranch is withheld from grazing for a definite period. The provision of permanent meadows and pastures has also been attempted so as to save the rest of the fields from over-grazing. The regulation of wild life is part of the co-ordinated conservation plan in the West.[18] The useful

[16] R. M. Gorrie. "Tackling the Soil Erosion Problem," *Statesman*. 10 Sept., 1939.

[17] See *Soil Conservation*. Nov., 1935.

[18] *Report*. National Wild Life Conference, Washington, 1936,

species of wild life must be preserved. Drainage and reclamation of marshes have destroyed the breeding grounds of the water-fowl and other forms of acquatic life. Deforestation and pollution of lakes and streams by erosion and other causes have destroyed animal food and jeopardised the survival of wild life. The removal of all weeds and other vegetation not of direct use to man is responsible for great damage to wild life. Unrestricted hunting has destroyed wild life in the country side. Bird-life needs protection to control the ravages of insects and other crop pests. Birds are very useful to farmers. Without favourable woodland conditions, bird-life cannot thrive at all. All burrowing insects that go below 6 inches effect a gradual inter-change of soil and sub-soil in varying degrees.[19] Wild life provides the farmer with extra food and income —besides the pleasure of good game. Wild life, by itself, is a farm crop. The rapidly vanishing population of water-fowl, quail and other birds must be rehabilitated. They need a favourable habitat, proper food and proper cover. Uncontrolled hunting, trapping and fishing have considerably affected the wild-life population in every country. The beaver in the West is a valuable animal. Its value lies more in what it does than in its hide or fur. Its rapid destruction has been a great mistake. The conservation of the beaver is a necessity in America because it prevents erosion. The earthworm is valuable for loosening up and aerating the soil.

The mischievous types of wild life have to be controlled or destroyed. The potential pests must be eliminated. Very often, soil erosion is caused by burrowing rodents. Gophers, squirrels, rabbits, woodrats and field-mice do considerable damage to terraces, structures and plantings in erosion control.[20] The Kengaroo rats destroy terraces badly. Over-grazing causes erosion. Live-stock must be controlled in all woodlands and slopes. The goat is the arch-destroyer of the natural covers on hills and fields.

[19] *Ecology*. April, 1935. p. 127—36.

[20] *Soil Conservation Digest*, July, 1936.

They are "the machine-guns of the forests."[21] Stock reduction is now recognised as part of a regular conservation plan in the West. But in India, the cow is a sacred animal and it is a sin to kill a bull. Useless live-stock thus hangs on and this helps over-grazing and erosion. Stock-reduction becomes a hopeless task in India in the face of deep religious convictions on the one hand and general illiteracy on the other.

Our cropping system should be so arranged as to give the maximum vegetative cover for the soil to prevent erosion as well as maximum food and cover for wild life. Fodder resources for live-stock have to be developed. Some trees and shrubs are particularly valuable for pheasant roosting cover. Over-cropping has so denuded the land surface that it has destroyed nesting sites, refuges, sanctuaries and covers for wild life. Dust storms affect birds and other animals badly. Game food from wild fruits and forest products has seriously declined. The retirement of sub-marginal lands offers a splendid opportunity for the conservation of wild life. Hitherto, our forest policy looked after human interests only. From now, it has to look after the interest of wild life as well. Forestry must be reconciled with the needs of wild life. The game is an annual crop and our aim should be to ensure a self-growing annual crop of game to compensate the farmer for the retirement of his sub-marginal lands in the interest of erosion control.

Ponds and Tanks

The provision of farm ponds has been encouraged in different countries. If every farm will have its own pond for storage, it will conserve rainfall, moderate floods, check erosion, provide water for live-stock and fill the sub-soil storage by seepage. Old water-works of all kinds should be improved and restored while new ones should be created. Every drop of water should be conserved to increase the underground storage.[22]

[21] R. M. Gorrie "Tackling the Soil Erosion Problem," *Statesman*, Sept. 10, 1939.

[22] He Marsh, *Ag. J. of India*, Oct., 1906.

Shore Line Erosion

Rivar-bank erosion is controlled by revetment of the bank. Willow and wire mattresses or stone mats—with one side ballasted with rock and sunk in the stream and the other side reaching up the river bank—are used in American rivers to protect the shore-line from the ravages of floods—especially in the Missouri and the Mississippi. They resist under-cutting and erosion. Re-inforced concrete piles, pile dikes, stone baskets and riprapping are also employed with the same view. The slowing down of the upstream current by artificial barriers has also been attempted. In Canada the Scheifele system of angular or inclined tree-planting is being tried.[23]

The force of high explosives is sometimes used in America for purposes of conservation. In a farm at Griffin in Georgia, rich and fertile soil was being rapidly washed away due to the underlying red clay which was impervious to water penetration. Two of the three washes were subsoiled with dynamite while the third was left as a check. The blasting was made in order to effect vertical drainage and to break up the hard pan. Wheat planted on the blasted section yielded 20 p.c. more than before. It resisted downpour and consequent erosion much better than before.[24]

Windbreaks

The provision of shelter-belts and the planting of trees to act as wind-breaks to prevent wind-erosion by sandstorms is now planned on a large scale in the U.S.A.[25] The cultivation of perennial grass and legumes is of great value in controlling wind erosion. Protection afforded by trees is more effective as windbreaks than other methods due to the great height of the trees and the greater space be-

[23] *Ag. Eng.*. Jan., 1929.

[24] *Power Farming*, Feb., 1918.

[25] *Conservation of Soil Resources*, U.S.A. Farmer's Bulletin, No. 342 (1909).

tween the rows. It protects wild-life and live-stock. These windbreaks act as mechanical obstructions to the wind, reduce its velocity and change its behaviour. They conserve moisture. President Roosevelt planned to bisect the Great Plain in the U.S.A. with a protective forest-belt to moderate wind-erosions by sand-storms. The Siberian elm, the Russian olive trees, green ash, chokeberry, American plum, jack-pine and juniper have been tested in America and found to be successful wind-breaks. Farmers in Iowa, Indiana and New York have planted wind-breaks with Norway spruce and white pine and these wind-breaks pay dividends. In Canada, they had planned to build a forest, 100 miles wide from the Canadian border to the Rio Grande. An American Sahara is in the making unless it is prevented by timely steps.

Retreat from Crop-line

Lastly, there must be selective retirement of worn out, excessively eroded marginal and sub-marginal lands from cultivation. Specially vulnerable types of land—*e.g.*, the steep highly erosive lands of formerly timbered areas and other sandy soils should retreat from the crop-line as they merely pile up heaps of sand on good lands below.[26] Sand hills need grass. Grassland is vital to vast areas in the country. Large areas which suffer from wind-erosion should never have been brought under the plough. In many areas they have put the tractor into lands that were really good for nothing but grazing. Such areas should revert to grass. It would be best to sod them down for pasturage. The growth of trees and grass on such idle or sub-marginal lands and abandoned areas which are too steep for profitable cultivation or which are highly susceptible to erosion will be a great advantage.[27] Steep mountain slopes are ideal for forest cultivation and they should

[26] U.S.A. *Department of Agriculture Year Book*, 1936, pp. 59-62.

[27] *First International Congress on Soil Science*, Washington, p. 748.

be permitted to remain in wood-land. In order to farm better, we have to farm less. To have cleared them for cultivation was really a crime against nature. It was a criminal trespass on society.

The various methods outlined above have been successfully adopted in the different Western countries with satisfactory results. They are slowly revolutionising farming methods. They are making the rain-drop behave properly. They are paving the way for keeping the farm at home. The work must necessarily be slow. It will need years—even a century would not be long enough for it. But it is certainly time to make a start. Soil is life and it is slipping away. It is time we safeguard our priceless heritage.

MR. KEYNES'S THEORY OF INTEREST

BY

B. P. ADARKAR and D. GHOSH.

I

The *raison d'être* of the following comments is (1) to clear up some points of difference between the old classical theory of interest (together with its neo-classical off-shoots) and the interesting new construction of Liquidity Preference on which Mr. Keynes has erected a logical structure to explain the phenomenon of interest, and (2) to offer some criticisms and suggestions in the humble hope that they may serve to mitigate the clash between the old and the new. It is obvious from recent discussions that Mr. Keynes's notions have not yet sufficiently crystallised into a self-consistent and connected theory,[1] and hence any criticism at this stage ought to be constructive rather than adverse. Mr. Keynes's explanation of the interest rate is easily detachable from its context in his "general" theory of employment, as it is not, we believe, a very essential ingredient of his doctrine of full employment. In the *Treatise* he had no complete doctrine of the rate of interest to offer, because he practically assumed the theory of what may be called the "automatic"[2] rate of interest;—there it was the concept of the natural rate which received a fuller treatment. Thus while the new conclusion, *viz.*, that under dynamic conditions income alters in such manner in response to changes in investment that the rate of saving is necessarily equal to that of investment, destroyed the validity as well as the usefulness of the natural-rate concept, it had no such bearing

[1] Cf. his admission. *Economic Journal*, June, 1937. p. 252.

[2] By this term we mean the rate of interest arrived at by the interplay of supply and demand forces irrespective of the Bank's interference.

upon the theory of the market rate of interest because no such theory was developed by Mr. Keynes in his *Treatise.* The conclusion which was independently arrived at by Marshall and others and on which Mr. Keynes has laid a reiterated emphasis in his *General Theory*, that the market rate cannot be determined by the marginal efficiency of capital, in view of the circular reasoning involved in such a notion,—this conclusion had for long left the interest rate, as Mr. Keynes says, "in the air." The classical confusion, moreover, between the market rate of interest and the various real and conceptual rates[3] has been patent to other writers before; this is now fully exposed by Mr. Keynes in his discussion of the "own" rates[4] on money and commodities. An analysis in terms of purely monetary quantities has been, therefore, long overdue, and in presenting such an analysis Mr. Keynes has been eminently successful, we think, at least so far as the discussion of the exact quantities involved is concerned.

II

The following propositions of Mr. Keynes, we believe, will be immediately acceptable to many: their acceptance, in fact, is an essential pre-requisite to any correct appreciation of the interest-rate problem. For this reason, and also with a view to eliminating the points of aggreement so as to focus attention upon what appear to us to be the main debatable issues, we give them below in the form of a list:—

(*a*) The market rate of interest is not one which equalises the rate of saving with that of investment (in the *Treatise* sense) or savings with investment (in the Wicksellian or Hayekian sense); for this is the function of the natural rate only, *i.e.*, of an *ideal* or "policy" rate of interest. The market rate, automatically established, is different from this conceptual rate which was enjoined upon the banking system by the neo-Wicksellians.

[3] These have been discussed by one of us; cf. Adarkar *Eheary of Monetary Policy*, Ch. i—vii.

[4] *General Theory*, Ch. 17.

(*b*) Nor, what is the same thing, does the market rate equalise the supply of and demand for savings, past and present, or either past or current, or *ex-post* or *ex-ante*. Past, as well as *ex-post*, savings are dead facts and are too enormous relatively to liquid cash (M_2) to have any direct bearing upon the market rate, while new and *ex-ante* savings have not yet affected the volume of available cash in the market.[5]

(*c*) Nor does the market rate of interest equate the supply and demand of *loans*, for these are a *de facto* affair and cannot directly affect the new contracts that are in the making.[6]

(*d*) The classical marginal analysis regarding the interrelation between the market rate and the process of individual saving is inapplicable to the market rate of interest, as has been shown also by earlier writers (particularly Cassel).

(*e*) The market rate is an "own" rate on money and not in any sense a real, physical or productivity rate, or a mere monetary counterpart of any of these. Consequently, it possesses the properties of the "own" rate of a material or commodity which is chosen as the monetary standard and which conditions the pricing and production systems.

(*f*) Whatever be its logical implications with reference to interest-rate determination, it must be admitted that a highly interesting account of the psychological processes of the money market has been provided by the Liquidity Preference analysis. This itself is a gain like the parallel investigation of Expectations, or the classical Time-Preference premise.

(*g*) The market rate of interest is not determined by the marginal efficiency of capital for that involves circular reasoning. (But this admission is not inconsistent with the recognition of the influence of marginal efficiency on the

[5] Professor Ohlin's, or rather the Swedish, view (*Economic Journal, June*, 1937, pp. 221 ff.) has been discussed later on.

[6] "Loans" should be distinguished here and throughout this article from "loanable funds" or "liquid cash."

interest-rate from the side of the demand for loanable funds or liquid cash, as explained *infra*.)

III

It is, thus, easy to agree with much that Mr. Keynes has got to say in criticism of the classical theory of interest. There are, however, one or two points on which a difference of opinion is likely to arise, though it may not be strictly material to the rejection or acceptance of the classical position. Thus, in stating the case against the classical theory, Mr. Keynes says: "It should be obvious that the rate of interest cannot be a return to saving or waiting as such. For, if a man hoards his savings in cash, he earns no interest, though he saves just as much as before. On the contrary, the mere definition of the rate of interest tells us in so many words that the rate of interest is the reward for parting with liquidity for a specified period."[7] This objection against the classical approach, while it undoubtedly proves the superiority of the liquidity preference approach, does not, however, invalidate the classical position. The answer to the objection is not, of course, what Professor Ohlin, on the basis of the Swedish banks' experience, gives, *viz.*, that the rate of interest on cash holdings is not always zero.[8] Professor Viner,[9] we think, is on better grounds when he points out that by analogous reasoning Mr. Keynes "could deny that wages are the reward for labour or that profit is the reward for risk-bearing because labour is sometimes done without anticipation or realisation of a return, and men who assume financial risks have been known to incur losses as a result of profits."[10] This line of reasoning can be improved upon by inquiring why wages are not paid when workmen are on strike, or, believing that the wage offered by the employer is less than the discommodity of labour,

[7] *General Theory*, p. 167.

[8] *Economic Journal*, June, 1937, p. 226.

[9] *Quarterly Journal of Economics*, November, 1936, p. 157.

[10] One need not, however, admit Professor Viner's proposition that the rate of interest is the "return for saving without liquidity," for that would be a bad form of grafting!

they prefer to remain idle. The fact is that any asset, be it monetary or non-monetary, be it a factor of production or merely consumable wealth, if it is unused, it cannot earn a return or income. In each case we can regard, if we so choose, that there is a certain pecuniary sacrifice corresponding to the discommodity or disutility (or, to use a positive term, the quasi-commodity of leisure) involved. This is not to deny that liquidity preference is a reason for hoarding. Here, moreover, we have to bear in mind that, in regard to the determination of a market price (such as the market rate of interest), there is an important distinction between the total available stock (of savings, or liquid cash or any other quantity) and the actual supply schedule corresponding to different positions of the rate of interest. Thus, if that part of the total stock which is not supplied does not earn (say) any interest or reward, a theory does not break down just for that reason.

Another objection that has been raised by Mr. Keynes with regard to the classical supply and demand apparatus,[11] with its investment demand-schedules (X_1 X'_1, X_2 X'_2 etc.) and the saving supply-schedules (represented by Y_1, Y_2, Y_3, etc., as related to corresponding incomes, Y_1, Y_2, Y_3, etc.). It must be admitted that so long as the interaction between income, investment and saving is not cleared up, the position of the interest-rate must remain indeterminate. But is this type of mutual interdependence, as further complicated by dependence on an extraneous factor, peculiar to the interest-rate phenomenon? Does not the whole economic system involve the simultaneous interaction of numerous forces out of which in practical theorisation only those of immediate importance have to be selected? Of course, if the extraneous factor (in the present case, changes in the saving supply-schedule) is quantitatively of a predominant importance, it must not be ignored. However, as may be admitted, the short-run shift in the saving supply-schedule is not so significant in relation to the quantities of old and floating savings in the market (which the classical theorists had in view) as to compel attention. Secondly, it is doubtful

[11] *General Theory*, pp. 179—183.

whether, as Mr. Keynes supposes, the Y-curves and the X-curves both ever fall in such a degree at any point in the trade cycle as to make an intersection between them impossible, especially in view of the smaller degree of flexibility of the Y-curves. On the other hand, the mutual interdependence analysis can be applied to liquidity preference also, though we are not sure there is any instability in the position of the interest-rate owing to LL_1 failing to intersect the illiquidity supply-schedule.[12]

There is one alternative reason why we think that the classical treatment may not be so self-inconsistent as has been made out. If we focus attention upon the market rate of interest only (*i.e.*, upon the market price for loanable funds or cash), it is not clear that income or the resultant Y-curve will have shifted merely because of a given shift in the investment *schedule*. It is only when the investment corresponding to the new demand-schedule has actually taken place that the Y-curve will begin to shift. In the diagram below (Fig. 1) the Y-curve for the time being

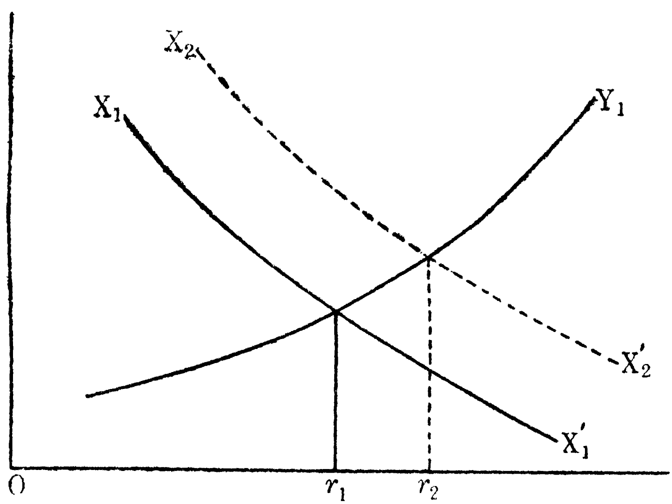


Fig.—1

remains unchanged; it is only the X-curve which has moved. Thus a new rate of interest (howsoever temporary it may be)

[12] By this we mean the supply curve of illiquid claims.

will have established itself. On the classical definition, moreover, the saving resulting from an increased investment and income activity, being a slow process, may not necessarily correspond to the increase in investment demand which is continually on the up-grade. Thus a classicalist might well aver that the upward swing of the rate of interest during a boom is in keeping with his doctrine.

In spite of these doubts, however, there will be general agreement with Mr. Keynes's view that the market rate, which is the own-rate on money, is concerned in the main with loanable or liquid cash and not with solidified or even unsolidified claims. What is lent out and borrowed is the available money in the market for which there is at any time a practical limit, *viz.*, M, irrespective of the total amount accumulated or to be accumulated during any period, *ex-post* or *ex-ante*. Of course, it is possible, if we like, to relate—as even Mr. Keynes has done—the quantities M, M_1 and M_2 to income (*e.g.*, $M_1 \times V = Y$) and through income to current saving; but that is merely a hypothetical mathematical relation. In any case, the fact remains that the market rate is directly related to the available cash (including deposits) which sets a limit to the possibility of loans. Thus the great achievement of Mr. Keynes's theory is that it has directed our attention to the correct quantities which go to make up the market-rate equation.[13]

[13] It is because of its quantitative vagueness that we have to reject Professor Ohlin's view representing the Swedish doctrine(?) in this regard that the market rate of interest is determined by the supply and demand of *credit*. (Cf. *Economic Journal*, June, 1937, pp. 222-7 for Professor Ohlin's view and pp. 245-8 for Mr. Keynes's criticism thereon.) Professor Ohlin's *ex-ante* analysis of the notion of "credit" confuses the quantities concerned in the interest-rate mechanism. His gross concept of credit is indeed out of the question, as this has nothing to do with the prevailing market rate. As regards the *net* proposition, we feel that Professor Ohlin appears to have been influenced by Mr. Keynes's own schematism of cash *versus* capital assets. However, Professor Ohlin's "supply and demand of credit" lack precision. He regards the supply of credit as consisting of "the willingness of certain individuals during a given period to *increase* their holdings of various claims and other kinds of assets *minus* the willingness of

IV

Let us now address ourselves to the Liquidity Preference concept. At the outset, we must clarify one important aspect of the interest-rate discussions which is apt to be overlooked and which, we believe, has led to some confusion. The point we have in mind is as regards the exact rate of interest about which we are now theorising. Thus, there are three important sets of interest-rates to be considered: (*a*) the *conceptual* rates, including the natural, normal, or equilibrium rates, and the real or commodity rates or own-rates, (*b*) the *automatic* rates of interest, which will be established by the free interplay of relevant forces, and (*c*) the *actual* rates prevailing in the market, in which there is an element of artificiality due to the control of central banks etc., and which include quite a variety of entities such as the market rates (short *cum* long) including the bill rate, the debenture rate etc. Now the logic applying to (*a*) does not apply to (*b*) and (*c*). The Wicksellian and allied concepts were of the first order; what Mr. Keynes and others are discussing now belongs to (*b*) and (*c*). Even the Böhm-Bawerkian and Fisherian rates of interest belong to (*a*), in the sense that they refer to long-period equilibria and tendencies, while the market rates of interest which we are here considering have reference to a cash market and are only distantly related to the psychological motives of time-preference, filial affection and prudence, or to the physical factors of marginal productivity, the profitability

others to *reduce* their corresponding holdings" (His italics.) On the other hand, the demand is given by the supply of new claims *minus* "*the reduction in the outstanding volume of old ones.*" (Our italics.) It it not clear, however, how this latter reduction of "outstanding claims" differs from the former reduction of "holding." Even if we gloss over this ambiguity, Professor Ohlin's theory boils down to merely the theory of the price of "claims" as determined by their supply and demand; and it is from this that he derives his theory of interest rates (pp. 224-5). Thus, we have to admit that Professor Ohlin's theory, as we shall see later, is practically identical with Mr. Keynes's; only that the latter would emphasise liquidity preference more than the supply-demand schematism.

of the round-aboutness of processes etc. Here as Mr. Keynes has well brought out, liquidity preference is the predominant *motive* behind both the supply and demand of cash, though on the side of demand we have also to admit the importance of marginal efficiency as a purely *monetary* idea. On the other hand, while the above distinctions should stress the significance of the new theory, it should put us on our guard against (*a*) denying the *fundamental* nature of the classical premises, and (*b*) criticising the earlier writers for not arriving at a theory of interest for which they did not always set out. Thus the neo-Wicksellian analysis of the natural rate as equalising saving and investment does not intend to provide us with the theory of either the automatic or the controlled rate of interest.[14]

Once we accept the position that the market rate of interest is a contractual price for the use of loanable cash and thus a purely monetary phenomenon, liquidity preference begins to appear as a dominating factor in its determination. The essence of liquidity preference can be summarised in the expressive language of Mr. Keynes as that "The possession of actual money lulls our disquietude"; the rate of interest, therefore, becomes "the premium which we require to make us part with money" and "the measure of the degree of our disquietude."[15] The disquietude arises from various causes which have been brilliantly discussed by Mr. Keynes in some of the most lucid chapters in the *General Theory*. The rate of interest is "a *price* of hoards" in the sense that it measures the "pecuniary sacrifice" of hoarding

[14] Similarly, Ricardo, in the passage quoted by Mr. Keynes in *General Theory*, pp. 190-2, is considering the rate of interest as being influenced by marginal efficiency on the demand side; he is not laying down any norms or "conceivable interest policies."

In this article we are concerned mainly with the concept of liquidity preference and the very valuable application of this by Mr. Keynes to the theory of interest. Consequently, we leave out a discussion of how the classical premisses of time-preference, etc., are in a sense, fundamental to the entire processes which lead to the interest rates, without determining them in an immediate or causal manner.

[15] *Quarterly Journal of Economics*, February, 1937, p. 216.

money; it "equates the demand and supply of hoards"; it depends on "the present supply of *money* and the demand schedule for a present claim on money in terms of a deferred claim on money"; it "equalises the attraction of holding idle cash and of holding the loan"; and finally, "the function of the rate of interest is to modify the money prices of other capital assets in such a way as to equalise the attraction of holding them and of holding cash."[16] The liquidity preference schedule LL_1 has a negative slope which shows the rate of interest falling as the quantity of money is increased. The reasons given for this by Mr. Keynes are (1) that when the rate of interest falls, it expands income and necessitates hoarding of a larger amount of cash for transactions[17] and (2) that a fall in the rate of interest makes some individuals hold more cash because their views regarding the future of the interest-rate differ from those of the rest of the market.

We believe that Mr. Keynes is right in maintaining that the schedule for liquidity preference must be regarded as giving a curve with a negative slope, not only for the above reasons but for one more important reason not stressed by Mr. Keynes, *viz.*, that with every fall in the rate of interest, the lender's wish to lend is reduced (liquidity preference

[16] Quotations are from *Economic Journal*, June, 1937, pp. 241, 250-1.

[17] Robertson criticises this on the ground that it ignores the well-known Gibsonian correlation between rising prices and rising rates of interest and that what people will hoard "in the face" of a given rate is not the same thing as what they will hoard as "an indirect consequence" of such a rate. (*Loc. cit.*, pp. 180-1). As regards the former objection, one of us has already investigated the question of the correlation (which is not such a simple and direct one as is commonly supposed) between interest rates and prices. (See Adarkar, *op. cit.*, *passim.*) It appears to us, however, that a fall in the rate of interest as a causal force may necessiate increased hoardings, just as an increased propensity to hoard (due to whatever causes) may cause the interest rate to rise. In the former case, LL_1 is unchanged and only a fall of the interest rate causes more cash to be held; in the latter, LL_1 shifts to a new position on the right so that on the same cash basis a higher rate of interest is established.

becomes high), while the borrower's wish to borrow rises (liquidity preference becomes high again). This point is the missing link between the old theory and the new, and brings out clearly the relation between the market psychology of borrowing and lending, and the liquidity motive, which Mr. Keynes would make a one-party affair only, as referring to each individual separately.

The central position given by Mr. Keynes to liquidity preference in his interest theory does not, however, accord well with his supply and demand schematism. It would have been truer to say, perhaps, that liquidity preference is a major influence both on the side of the demand for and on that of the supply of the *use* of liquid cash or loanable funds (M_2). A person has the option of holding a part of his resources in cash or in the form of a loan asset. Given his liquidity preferences, the rate of interest will determine how he exercises this option. But the actual exercise of this option *presupposes the existence of and depends upon the willingness of another party* to hold cash or assets in a reciprocal manner. And since this willingness is the latter's liquidity preference, it will be correct to say that the rate of interest is determined by the *impact* of various liquidity preferences in the market, *i.e.*, by the demand for and supply of the use of loanable or liquid cash. There is thus no harm in recognising the fact that behind the forces of demand and supply we have not only the considerations of earning profits or yields but also liquidity preferences.

Mr. Keynes's monetary quantities of M_1 and M_2 are undoubtedly just the quantities which are relevant to the interest-rate mechanism. But the manner in which he employs them to arrive at the rate of interest is, in our view, indirect and, in this respect, compares with Professor Ohlin's way of deriving the rate of interest from the prices of assets. Thus, if we denote the income goods bought and sold during a given period by E, their price-level by P_1 and the relevant velocity of M_1 by V_1, then $M_1 \times V_1 = P_1 \times E$. Similarly, if C stands for all capital assets actually bought and sold during a given period, P_2 for their price-level, and V_2 for the relevant velocity of M_2, then $M_2 \times V_2 = P_2 \times C$. Thus it would appear, Mr. Keynes's theory becomes, in effect,

immediately a theory of the prices of capital assets and of the prices of income goods, etc., and only ultimately a theory of interest which is almost a by-product, from this viewpoint. This fact may be graphically represented as follows:—

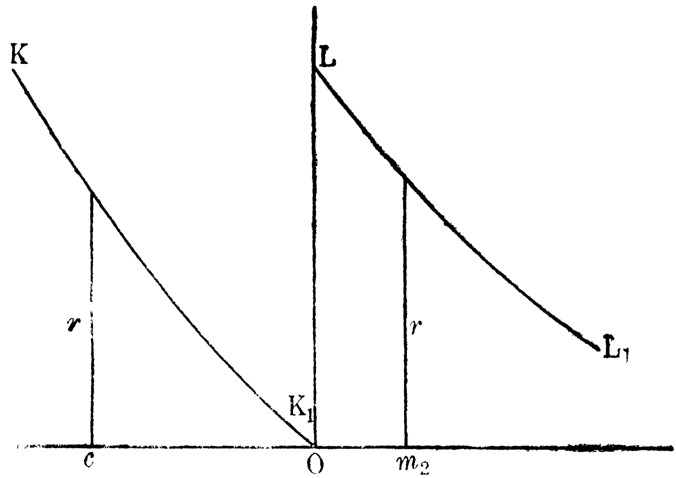


Fig.2

At a given rate of interest r, the indifference position of cash *versus* assets may be represented by means of two curves LL_1 (liquidity preference) and KK_1 (illiquidity preference), such that an individual holds Om_2 in cash and Oc in assets, Om_2+Oc remaining nearly constant.[18] Thus, the transactions are in the nature of, what Professor Ohlin would call, alternate purchase and sale plans. But such curves are in no way peculiar to the interest-rate phenomenon; for, we can regard every exchange as an alternative purchase or sale. Thus, if a man decides to hold wheat instead of exchanging it for rice, we do not speak of merely his wheat-preference being greater than his rice-preference, but that the exchange-value of wheat in terms of rice is not sufficiently high for him to part with his wheat. This exchange-value of wheat is established by the *market* supply

[18] So that $\xi\, Oc =$ the sum of all loans *plus* other capital assets, and $\xi\, Om_2 = M_2$.

and demand of wheat in terms of rice. Nor would it be much improvement on the prevailing doctrine to say that wages are determined by the marginal utility of leisure or by leisure-preference.

On the other hand, it may not be quite appropriate to describe liquidity-preference as merely a matter between cash and assets. There are various types of capital assets including loans which represent various degrees of liquidity and in the capital market there is going on a continual conversion of less liquid into more liquid assets and *vice versa*. These are exchange transactions pure and simple.[19] This is not to deny that there is ever an intimate relationship between the rate of interest and the yields on capital assets, but to derive the theory of interest from these latter is to argue back to the marginal productivity concept of interest which we discarded. Mr. Keynes's converse proposition, that the rate of interest modifies the prices of capital assets in such manner as to equalise the attraction of holding them and of holding cash,[20] implies a *direct* determination of prices of assets by the interest-rates, as an event prior to actual borrowings of cash and purchases of the assets. Now, although it is true that the prices of most capital assets fall in line with an altered rate of interest, this phenomenon is more or less a psychological one presuming upon later actions, *viz.*, the purchases and sales of capital assets. This means merely that the market anticipates the later rise in the prices of assets due to funds actually changing hands.[21] It will not do, therefore, to ignore the influence of actual transactions in cash upon the market rate of interest and *vice versa.*

[19] Moreover, where existing assets change hands against cash the event is of little practical significance to economic society; only where new assets are being created, *i.e.*, where marginal efficiency is operative, does *exchange* of loans for cash, *i.e.*, borrowing, become highly significant.

[20] *Economic Journal,* June, 1937, p. 250.

[21] Such an anticipation of events by the market is not peculiar to the prices of assets either, but holds good of a number of other things.

Mr. Keynes admits[22] that the demand for investment, *i.e.*, the investment demand-schedule is ultimately based upon marginal efficiency (which is, broadly speaking, the same as the marginal productivity) of capital. But it does not determine the rate of interest on loans; on the contrary, given the schedule of the marginal efficiency, the rate of interest on money determines the extent of investment. This seems to us to be a one-way affair. The conclusion of Mr. Keynes is based upon the very important assumption that the money rate of interest is, so to say, pre-determined and sticky. The stickiness, however, would be acceptable, if, given a rigid liquidity-preference schedule, (*a*) the demand for money were absolutely elastic and (*b*) the supply of money absolutely inelastic. But the demand for money (here M_2 alone is implied) is not absolutely elastic in all circumstances. It would be so only when conditions of perfect certainty prevailed. But then, in such circumstances, liquidity preference will be equal to zero. On the other hand, the supply of money, unless controlled by authority, though less elastic than the supply of other assets, is not completely so, at least in an open economy.

There are some further marginalia upon Mr. Keynes's liquidity analysis which may be jotted down here:—

(1) If liquidity-preference is due to the uncertainty of the position of the interests-rate about a "safe" level or norm, does a change in the norm itself alter the *degree* of uncertainty and, therefore, the conditions which determine the liquidity premium? Or, to put it concretely, is a lower rate of interest likely to fluctuate by a greater percentage than a higher one, and, therefore, likely to be associated with a greater degree of liquidity-preference?

(2) According to Mr. Keynes,

$$M = M_1 + M_2 = L_1 \ (Y) + L_2 \ (r)$$

But since a person has always the option of varying the ratio between m_1 and m_2, *i.e.*, his shares of M_1 and M_2, his individual marginal liquidity premium on m_1 must be equal

[22] *General Theory*, p. 178.

to that on m_2, and this must be true of society as a whole as well. Thus, the rate of interest is influenced not only by the speculative motive (L_2) but also by other motives (L_1), and through L_1 the rate of interest also becomes related to Y. Perhaps, all this is implicit in Mr. Keynes's position, but the consequence is that if the rate of interest is related to Y, Y also affects the rate of interest—a conclusion which is not consistent with the role of the rate of interest as a determinant rather than a determinate.

(3) The Keynesian analysis of new bank credit in relation to liquidity-preference obscures the fact that the banks or rather the Central Bank (which is responsible for the initial impulse of the cash basis of the new credit) has no liquidity-preferences in regard to the initial transactions. Once the new money is mixed up with the existing money, the rest of the process is, of course, easy to follow. However, here too, we believe, the proposition that the new insertion of credit increases the supply of loanable funds is a simpler and more direct one.

(4) The analysis regarding the *influence* of changes in M upon the rate of interest and liquidity-preference is not materially different from that regarding the loanable funds, and for this reason we think Mr. Keynes can acquit himself quite easily in following up the behaviour of liquidity-preference through the upward and downward movements of the trade cycle in a manner consistent with his own premises.

V

To sum up, therefore, there is no doubt that Mr. Keynes has in his *General Theory* put us on a new track which, if followed up, is bound to lead to a coherent theory of the market rate of interest. In doing so he has had to clear up quite a host of misconceptions which have haunted economic theory for long. Criticism is an easier business than creation, particularly when the critic uses the new tools of thought presented by the writer himself to show the latter's inconsistencies and formal errors. Our aim in the above paragraphs has been to round off sharp corners and to mitigate friction. Our main suggestion has been that

Liquidity Preference might be made the plinth of the new structure, but that the actual determination of the interest rate could be left to the interaction of the supply of and demand for the use of loanable or liquid cash. It is not necessary to suppose, however, that the total of liquid cash (M_2) is *wholly* lent out or borrowed at the current rate of interest; for such a supposition would obscure the importance of the distinction between *stock* and *supply* which is fundamental to any market price such as the market rate of interest is. In so far, however, as the rate is *controlled*, a stable position will not be attained until the forces of supply and demand get adjusted to the new rate. Such an analysis will be quite consistent with the liquidity doctrine, because liquidity-preference is indubitably the main psychological force underlying both supply and demand in the *cash* market, while productivity or profitability is only a force on the side of demand.

NOTES AND MEMORANDA

The Negative Rate of Interest

The belief in the possibility of a negative rate of interest has been held by economists for a pretty long time now. Evidence of such a belief is to be found in the works of economists of the eminence of Marshall, Foxwell, Keynes and Fisher.[1] For all of them the rate of interest may not only fall to zero but may conceivably cross the zero line and become a negative quantity. It should not be difficult to prove that such a view and consequently the relevant theories of interest have no scientific or logical foundation. The very phrase "negative rate of interest" is an example of a curious contradiction in terms. Interest is the earning of capital. Capital, being a factor of production, is necessarily

[1] Marshall: "In such a state of things the postponment of, and waiting for enjoyment would be an action that incurred a penalty rather than reaped a reward: by handing over his means to another to be taken care of, a person could only expect to get a sure promise of something less, and not of something more than that which he lent: the rate of interest would be negative." *Principles*, (eighth edition), p. 232.

Foxwell: That the rate of interest may conceivably become negative quantity, was discussed by Foxwell in 1886 in a paper on *Some Social Aspects of Banking* read before the Bankers' Institutes.

Keynes: He believes in the abstract possibility of the rate of interest being negative. "We have assumed so far an institutional factor which prevents the rate of interest from being negative." *General Theory*, p. 218.

Fisher: In his book on *The Theory of Interest*, Prof. Fisher has, by a long process of reasoning, attempted to show how the rate of interest can be zero and even negative. His examples of hard-tacks and figs will be recalled by his readers. He has, it may be mentioned, confused net interest with that omnibus concept of gross interest in one case and commodity interest in the other.

productive.[2] Interest is, therefore, invariably positive. This point has been explained later with the help of a diagram.

The fallacious view that the rate of interest can be negative has its foundation partly in the confusion between the pure or net interest and gross interest. That gross interest can be negative should be obvious to all. For it is an algebraic sum of net interest and other charges which are anything but interest. If by negative interest is meant negative gross interest then the phenomenon of negative interest becomes so bare and simple that it hardly deserves a mention in the study of economics. For Marshall, Foxwell Fisher and others the negative rate of interest is really the positive pure rate of interest, plus the negative charge for the safe custody of capital. In certain cases the conception of zero rate of interest owes its origin to the failure to realise the fact that interest and money interest are not one and the same thing. There is no, money interest in Robinsonian economy. But there *is* capital and there *is* its earning, its productivity, the pure interest.[3]

[2] Every factor of production is productive (of utility) during the full period of its employment. If it were to produce no income (and income in the final analysis is psychic) it would not be used as a factor of production. Of course, the income thus understood is a derived one. While the capital is being used as a factor of production the income that is concurrently earned is due to the expectation of the final income. Whether the final income is positive or not matters little, so long as a positive income is anticipated. And unless such a positive return is expected a thing is not used as capital. We might, if we so desired, call the final income rent of the capital good and the income that is being concurrently earned interest. Thus logically correct conception of interest is the only one that enables us to see the positive interest of a productive factor in the final negative result, which is an algebraic sum of interest and positive or negative profit.

[3] Most economists. Fisher and Keynes not excepted, confuse interest with money interest. For them interest arises only when there are two persons—one a lender, the other a borrower. They fail to realise the fact that the functions of a borrower and a lender can be performed by the same man. Robinson Crusoe *did* produce wealth, he *did* use capital and his capital *was* productive. He *did* perform the function of waiting and he *did* earn interest for

One of the fruitful sources of confusion between pure interest, gross interest and money interest can be traced to the erroneous conception of the term capital. A sum of money deposited in a bank to ensure its safety is not capital in so far as it is regarded as a valuable *commodity*. For, capital is what is rightly called *pure* capital. The sum of money considered as a valuable possession, needing a safe place for deposit, is only a capital good. Nor is hoarded wealth ever to be confused with capital.[4] A capital good is a good that is *saved* as contra-distinguished from a good that is consumed. Money or wealth that is hoarded is not, in the right sense of the word, saved. A hoard satisfies a direct want—the satisfaction derived from it is direct, whereas the satisfaction derived from a capital good or *saved* wealth is derived.[5]

Is capital, understood in its correct economic sense, then, likely to yield negative pure interest? The question could be answered with a straightforward "no." But we shall proceed analytically and logically to arrive at a correct and full answer to this question.

Let us begin by taking the case of a man who has a certain stock of a commodity which he can either use in the present or save for future consumption. The amount saved would become capital in such a case.[6] In the diagram

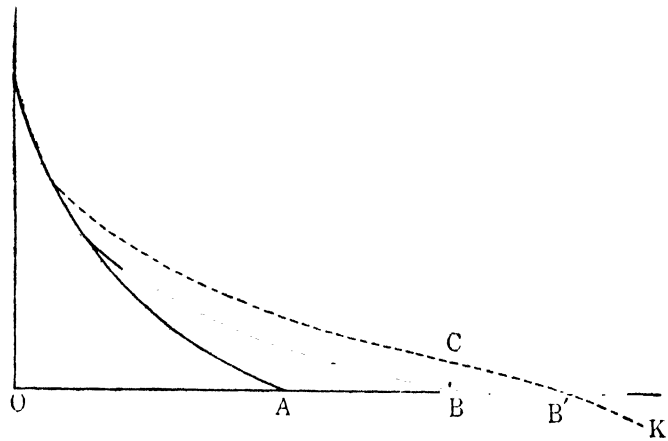
it. Would our economists say that there was no interest in his case? The divergencies between the various modern theories of interest are in no small measure due to this erroneous conception of interest.

[4] For Keynes there is no difference between saving and hoarding. He mentions "To satisfy pure miserliness, *i.e.*, unreasonable but insistent inhibitions against acts of expenditure as such" as a cause of accumulation of saving.

[5] For Keynes's interest is due not to saving but to not-hoarding. It would appear, therefore, that he was excluding hoarded wealth from capital. This, however, is not the fact. For, Keynes understands by interest money-interest or at any rate what the borrower receives from the lender when the lender and the borrower are not one and the same man. If he were made to see that interest can be earned by a man lending to himself he would include a miser's hoard in capital.

[6] Capital is best defined as that which is saved. This is not the place to show that this definition leads to the correct

below the curve A represents the diminishing marginal utility of expenditure; the curve C the diminishing marginal utility of saving (undiscounted); and the curve B the diminishing discounted marginal utility of saving. The vertical distance between the curves C and B indicates the rate of time-preference.



If the stock of wealth be OB, OA of it would be consumed and AB saved; the rate of interest would equal CB and would balance the rate of time-preference.

If the stock of wealth be OB′, OA would be consumed and AB′ saved; the rate of interest would be zero. The future marginal utility of AB′ saved is zero, its discounted value is also zero. The curve B coincides with the X-axis after reaching the point B. If the rate of discount be not zero, saving of AB′ would entail a loss of utility in the present, to minimise which consumption would also be increased. But it is more reasonable to suppose that human mind can ignore the quantity BB′, so that the saving of OB′ causes no disutility.[7] In that case interest would be zero.

conception of capital as pure capital. When we talk of the commodity saved as capital we really mean to say that it is a capital good. The difference between what is and what is not a capital good is of the same order as that between consumption and production.

[7] It is difficult to say whether the rate of time-preference, indicated in the diagram by the vertical distance between curves B

When the stock is larger than OB′ the person would not consume the excess over OB′ even in the future—it would be as good as non-existing. The rate of interest would still be zero.[8]

If the person cannot completely disregard the extra amount of the commodity, that is, if it cannot but be a cause of disutility to him in future, then the dotted curve would extend below the X-axis and the curve would take the shape B′K after the point B′.

In such a case it is conceivable that when the stock is larger than OB′, a greater quantity than OA would be consumed and would give negative marginal utility, giving indication of a negative rate of interest, in the sense that the amount saved instead of having more utility in the future and less, by discount, in the present, has really a greater utility or less disutility in the present.

Such a case is, however, purely hypothetical. It is not easily possible to conceive of a stock of a commodity that would be in excess of all present and future wants.[9] But even when such a case is imaginable it is not difficult to see how the quantity of the commodity in excess of the amount AB′ cannot be regarded as having been saved. For, to save means not to consume—it implies the idea of abstaining from the present use and clearly there is no such saving when all present wants are fully satisfied.[10] As a matter of

and C, is constant or diminishing or increasing. But it seems most reasonable to assume, in the absence of any clear contrary indication, that it gradually decreases. Consistently with this assumption the curve B is drawn here to meet the curve C in B′. Further light is thrown on this point later in the body of the article.

[8] The Curve C, under such a consideration, would coincide with the X-axis after reaching the point B′.

[9] When we understand by capital pure capital, say, as money kept aside for future use, it becomes abundantly clear that such a case of marginal utility sinking to zero or becoming a negative quantity is impossible.

[10] This point can be explained in another way also. Saving necessarily involves abstinence and when all present wants that a commodity can satisfy are fulfilled, there is obviously no abstinence involved in the act of letting the surplus remain unused.

fact, the quantity AB′ fixed a maximum limit to the amount of capital that the person can create, that is, accumulate. All quantities of the commodity in excess of the amount OB′ must therefore be looked upon as a fresh commodity, satisfying or obstructing the satisfaction of some other want than the one that is under consideration. For example, suppose OB′ quantity of wheat is all that would ever be needed by a person (assume that wheat is not perishable); then the surplus above this quantity would neither be consumed as food nor saved as a provision for the future, but would be treated merely as a commodity that either satisfies some other want or obstructs its satisfaction. Suppose that this surplus amount causes some disutility—an assumption that is most favourable to the treatment of the problem of the so-called negative interest. The most natural course for the person to adopt in such a case is perhaps to destroy this superfluous quantity. Let us say he burns it. We then should look upon this surplus as a commodity satisfying another want, the want to burn it away. The quantity of wheat that is burnt would in such a case be his capital (not of the same type as the wheat saved) satisfying some remote want. More correctly it would be *land*, for the wheat that is burnt is not capable of an alternative use and is, therefore, not capital in the strict sense of the word.[11] Adopting this correct attitude towards every amount of the commodity in excess of OB′ we can easily explain how the rate of interest can never become negative.

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Of course, the word abstinence has to be used in its correct sense. Those economists who maintain that saving involves no abstinence on the part of the rich man, misuse the word abstinence. The fact that a rich man can save more easily than a poor, does not mean that he can save without foregoing the satisfaction of some possible present wants.

[11] Anything that is not wanted—superfluous quantity of wheat in this example—has to be wanted for purposes of its disposal. But as it can be wanted for that and only that purpose and cannot be used for purposes of direct satisfaction of want, it is best defined as land. For, capital is a creation of man, that is, something that he has turned into capital.

'Consumer's Surplus'—A Rejoinder

Dr. Gopal in his criticism of my 'Consumer's Surplus—A Defence,'[1] appearing in the October, 1939, issue of this Journal has missed entirely the significance of most of my arguments. He begins by arguing that Marshall does not stand in need of any rectification or interpretation. Quite apart from the many objections raised as to the correctness of Marshall's arguments, time and again, economists have pointed out confusions of thought in his exposition. Cannan[2] and Miller[3] have referred to such confusion of ideas. Davenport's[4] irritation on this score knows no bounds. Mrs. Ursula K. Hicks in a recent book[5] refers to Marshall's thesis as the 'obscure doctrine of consumer's surplus.' H. W. Robinson of Oxford asserts in a very recent article[6] that Marshall's discussion of Consumer's Surplus is somewhat ambiguous. Others holding similar views may easily be found. Marshall's exposition seems, therefore, to need some modification, unless ambiguity and obscurity are virtues. In fact, notwithstanding his contention. Dr. Gopal at a later stage offers his own interpretation of Marshall.

Dr. Gopal has quoted illuminating passages from Marshall to show that he had a very clear idea about the distinction between value and utility. But this is no answer. The real point is, not whether Marshall knew the distinction, but whether he kept up the distinction throughout his discussion. I do not claim that the errors committed by him are serious; generally the context makes Marshall's ideas clear. All the same they are errors, and give point to my contention that Marshall's exposition sometimes lacks 'scientific dignity.' Davenport has clearly pointed out how in his discussion of Consumer's Surplus Marshall has

[1] *Indian Journal of Economics*, January, 1939.

[2] *Economica*, 1924.

[3] *Quarterly Journal of Economics*, 1927.

[4] *The Economics of Alfred Marshall*—Note on p. 101.

[5] *The Finance of the British Government*, Chapter XV, p. 253.

[6] *South African Journal of Economics*, September, 1939.

confused between utility-surplus and price-surplus.[7] A few quotations given by Davenport may be reproduced here to show that elsewhere also, Marshall makes the same confusion and that he sometimes uses the term "value" when he means only 'utility':—

" . . . . being careful of course to get good *value* in return for his outlay . . . ." (Principles, p. 137),

" applied to practical problems the economist . . . . must concern himself with the ultimate aims of man, and take account of differences in *real value* between gratifications that are equally powerful incentives to action . . . ." (Principles, p. 17),

" . . . . the more a person spends on anything the less power he retains of purchasing more of it or of other things and the greater is the *value* of money to him. (In technical language every fresh expenditure increases the marginal *value* of money to him) . . . ." (Principles, p. 132),

" a durable good such as a piano is the portable source of many pleasures more or less remote, and its *value* to a purchaser is the aggregate of the usance or worth to him of all pleasures . . . ." (Principles, p. 123).

Referring to Marshall's confusion between utility and value I had further stated, "The definition of Consumer's Surplus as the difference between the sum which measures total utility and that which measures exchange value is untenable for the simple reason that there can be no common unit real or imaginary which can measure two unlike things as utility and exchange value." This argument is objected to on the ground that, 'it is not a comparison between utility, a subjective thing and price or exchange value, an objective thing.' Rather, 'it is a comparison of a like thing, *viz.*, total utility received and utility given away in a purchase.' The brilliant discussions of Wicksteed, Davenport and others have clearly shown that price does not *simply* indicate utility as Dr. Gopal thinks. In any case, Dr. Gopal may concede that money in the strict sense of the term has no utility of its own. Its utility consists in the utility of the commodities it can purchase. To think then of the utility

[7] *The Economics of Alfred Marshall*—Note on p. 101.

given up in price-payment is to think of the utility of the commodities which could be obtained by the money given up. But the utility that can be so obtained is indeterminate. With say, Rs. 10 parted in a purchase by an individual may be purchased 40 measures of rice at 4 annas a measure, or 20 yards of cloth at 8 annas a yard, or 2 chairs at Rs. 5 each, or 5 yards of silk at Rs. 2 a yard. In each case the utility obtained would be entirely different in volume. Which of these utilities are we to take as the utility of the money given up? In fact, though for the sake of brevity and convenience we often speak of the utility of money, in the strict sense of the term, what money *has*, is not utility, but purchasing power. When we talk of the utility of money, we are talking of utility, not in the present tense, but in the future tense; not of utility as it already exists, but of utility in anticipation, *i.e.*, in anticipation of the conversion of money into commodities. The original difficulty thus still remains. How to compare total utility obtained with purchasing power when they are fundamentally unlike?

Marshall, I had stated, is always careful to refer to consumer's surplus in terms of money and not in terms of utilities. He says, 'consumer's surplus *is* 6 sh.' (p. 126)[8], and again 'Consumer's surplus *is* 45 sh.' (p. 127), and not that the consumer's surplus is *indicated* by 6 or 45 sh. He also observes, "the excess of the price he would be willing to pay rather than go without the thing, over that which he actually does pay, is the *economic measure* of this *surplus satisfaction.*" (p. 124). The direct significance of these statements has been lost on Dr. Gopal, whose attention seems to have been completely side-tracked by a comparatively minor issue, *viz.*, the question of 'mathematical exactitude,[9] concerning Marshall's exposition. What I have endeavoured to show is, that there are two distinct ideas in Marshall,

[8] Page references are to Marshall's *Principles.*

[9] In fact, I have not stated that Marshall claimed success in his attempt to give the concept mathematical exactitude. Reference has been made only to the failure of his attempt—a failure admitted by Marshall himself.

viz., (i) the surplus satisfaction enjoyed by consumers, and (ii) the *economic measure* of this surplus satisfaction called by Marshall 'Consumer's Surplus.' A barometer might indicate the weather; but it is not to be confused with the weather itself. A barometer may be defective and so fail to indicate the impending rain; but that does not veto the occurrence of the rain. Similarly Marshall's consumer's surplus which is only an economic measure of 'surplus satisfaction' is not to be confused with the 'surplus satisfaction' itself. And criticism of the consumer's surplus is not to be taken as criticism of the surplus satisfaction. Dr. Gopal is not alone in failing to recognise this distinction and in indulging in what I am constrained to remark brilliant beating about the bush. In his thesis, however, the notion that 'consumer's surplus' and 'surplus satisfaction' are one and the same struts across the arena of discussion with a Puck-like mischievousness making confusion at every turn worse confounded.

Dr. Gopal next turns his attention to what he calls the 'totally erroneous' idea of the Marginal Surplus of Utilities.[10] In his criticism of this concept he excels himself in combining commendable erudition with profound confusion of thought. At the outest it may be pointed out that no originality has been claimed for this concept. There is nothing new about it except the name, and if a better name could be found it may be readily substituted. The concept is implicit in Marshall's idea of 'surplus satisfaction,' for it aims only at making definite Marshall's notion of that surplus. In my previous article I have pointed out that except for the name the concept in its entirety is to be found in Wicksteed's discussion on Diminishing Psychic Returns. But Wicksteed is not alone in conceiving of this concept. Miller[11] referring to the well-known illustration of an individual consuming a number of oranges one after

[10] This term refers to the difference between total utility, and the product of marginal utility and the number of units. For a fuller explanation see *Indian Journal of Economics*, January, 1939, p. 415.

[11] *Quarterly Journal of Economics*, 1927.

another says, "Here indeed we have the principle of diminishing utility working in a simple and direct way with the result that we obtain a series of decreasing satisfactions, the sum of which is considerably greater than the product of the number of units multiplied by the satisfaction which the marginal yields," and again in the same discussion, ". . . . . . there is immediate significance to the notion of a total utility that greatly exceeds the product of the marginal multiplied by the number of units." A similar reference to the difference between total utility and the marginal utility multiplied by the number of units is to be detected in Cannan's criticism of Marshall.[12] This concept apparently so simple as to be merely referred to without any explanations by these economists, however, presents insurmountable difficulties to Dr. Gopal.

"For the number of units purchased," says Dr. Gopal, "is objectively and easily measurable, whereas marginal utility as such is like total utility a subjective satisfaction. How then does Mr. Tharakan propose firstly to multiply an unknowable mental state by an objective number of units and secondly to find out marginal and total utilities excepting as represented in price?" It may be pointed out that what is *objectively* and easily measurable is not the '*number* of units purchased,' as Dr. Gopal seems to think, but the *units* themselves. A number is something abstract and not something objective. We may *represent* a number by a symbol, or by some pebbles, or some oranges or the units of any other commodity; but the number itself is something that can only be comprehended by the mind. Such being the case there is no difficulty in multiplying marginal utility with the *number* of units purchased, for both are abstract. Wicksteed and Miller have found no difficulty in conceiving of such a multiplication: nor do I find any.

The second question how marginal and total utilities could be measured except as represented in price is more easily answered. We can have the utility of any unit of a commodity, preferably the utility of the marginal unit as the basis for comparison and measurement. We may

[12] *Economica*, 1924.

assume the utility of the 5 oranges as one unit or for the sake of convenience as 10 units. If the consumer feels that the fourth orange has given him twice as much satisfaction as the 5th, the 3rd orange thrice as much satisfaction as the 5th, the 2nd $4\frac{1}{2}$ times as much, and the 1st orange $6\frac{1}{2}$ times as much, we can construct the following table to indicate the Marginal Surplus of utilities.

	Utility	Marginal Utility	Marginal Surplus of Utilities
For the 1st orange	65 units	10 units	55 units
For the 2nd orange	45 units	10 units	35 units
For the 3rd orange	30 units	10 units	20 units
For the 4th orange	20 units	10 units	10 units
For the 5th orange	10 units	10 units	...
For the whole supply	170 units	50 units	120 units

We may say, then, that the marginal surplus of utilities is equal to 120 units, a unit of utility being one-tenth of the utility of the fifth orange or we may say that the marginal surplus of utilities amounts to twelve times the utility of the fifth orange consumed. It may be doubted whether the consumer would be able to judge so accurately the utilities of the other oranges in comparison with the utility of the marginal one. But such a process of comparison is more easy and natural than the process of finding out what the consumer would have paid for the 1st, 2nd, 3rd, and 4th oranges rather than forgo their use. In fact, in trying to imagine what he might have paid for the 1st orange rather than forgo its use, the consumer is obliged to consider as the first step in the process of the difficult calculation, how much more useful the 1st orange is in comparison the marginal one. Secondly, in this method of measurement we avoid all the errors arising from the use of such an admittedly imperfect measuring rod as money. Thirdly, it must be remembered that only 'theoretical exactitude' is claimed, and that the correctness of a theory does not depend

on our capacity to have some of its results objectively measured. The marginal surplus of utilities is a derivative of the principle of diminishing utility, and this principle would be quite valid even in the case of a Robinson Crusoe left on an island with nothing but oranges, and having no mechanism, not to speak of a price-mechanism to have its results objectively measured or tested. He would still find without any such artificial aid that the first orange gives him more satisfaction than the second, the second more than the third and so on, and he would find it extremely easy to conclude that the total utility of the five oranges is very much more than the utility of the fifth orange multiplied by five.

In this connection, it has to be pointed out, that Dr. Gopal's assertion, "the question how far money can measure utility was raised in connection with consumer's surplus by Nicholson more than 45 years ago and was answered," is misleading, if it implies, as doubtless it is meant to imply, that Prof. Edgeworth's answer to Nicholson was quite conclusive. To my mind, in that very interesting controversy conducted in the columns of the *Economic Journal*, Nicholson seems to have the better of the argument, and in spite of Edgeworth's answer men of eminence like Cannan, Davenport and others have not been wanting to re-emphasise some of the more important objections raised by Nicholson. In fact, Edgeworth himself seems to have recognised that his arguments were not quite conclusive, for in his final reply[13] he closed the controversy like Sir Roger in Addison's Spectator with the significant reflection that differences of opinion are possible, *i.e.*, much could be said on both sides.

I have not attributed to Taussig fundamental differences with Marshall as Dr. Gopal assumes. The only difference that has been pointed out is the difference in the *method* of calculating consumer's surplus. Nor have I credited Marshall 'with avoiding Taussig's error by using the phrase, other things being equal,' as Dr. Gopal assumes. Marshall avoids the error by following a different procedure in his illustration. Dr. Gopal contends that Taussig

[13] *Economic Journal*, 1894.

states the case in the simplest terms and that his illustration does not aim at accuracy of measurement, but only at making the conception clear. This defence raises a general issue. To what extent can inaccuracies be permitted in an illustration meant to make conceptions clear? I do not contend that perfect accuracy is possible or even necessary in an illustrative case. But obviously there must be certain limits. When an illustration remains within the realm of probability, it may be considered a good illustration even if no factual accuracy can be claimed for it. When it trenches into the realm of the improbable, it may still be considered an illustration though a bad one. But when it passes from even the twilight of improbability into the utter darkness of the impossible, then indeed, it is neither good nor bad; it simply ceases to be an illustration. Taussig's illustration falls under this category.

He assumes that a man having 105 cents to spare for oranges at the rate of 50 cents for the 1st, 25 for the 2nd, 15 for the 3rd, 10 for the 4th, and 5 for the 5th would still buy only 5 oranges when he has to pay only 25 cents for the whole lot at the market price of 5 cents per orange. This identity between the *number* of units purchased by the same individual under the two widely differing systems of purchase is an impossibility in the case of a normal man purchasing a *representative* commodity. In practice, an individual who was willing to pay 105 cents for the first 5 oranges would certainly buy a few more oranges when he finds that the first five have cost him only a fraction of the amount, *i.e.*, 25 cents. And even if he buys one orange more the marginal unit becomes different. In other words, the margin shifts because conditions change and thus destroys the very basis for comparison and calculation. The assumption that the marginal unit is the same under the two widely differing systems of purchase is necessary in Taussig's method of calculating the consumer's surplus. That assumption is, however, untenable and makes such calculation impossible.[14]

[14] For a more detailed explanation refer p. 415-416 of the *Indian Journal of Economics*, January, 1939.

Marshall has taken such elaborate pains with his illustration and has appended to it long footnotes, that it is not easy to improve upon his explanations in this respect. The reader has only to go through his discussion carefully to understand that the method of calculation adopted is entirely different from that of Taussig. There is nothing of Taussig's deceptive simplicity. Marshall's illustration is more laboured; but then the labour has not been wasted. Even if we grant Cannan's contention[15] that the figures given by Marshall are not historical facts, there is nothing of impossibility or even improbability in his illustration.

My assertion that 'there is no such thing as a consumer's surplus for all commodities taken together' is surprising to Dr. Gopal. A great deal of the surprise might vanish if it is remembered that Marshall's consumer's surplus does not mean 'surplus satisfaction.' To Dr. Gopal these two terms seem to be identical in meaning and therefore easily interchangeable. For he says that my argument means that "a person cannot get *more satisfaction* than his resources, *i.e.*, he can get no *consumer's surplus*." Later he says, ". . . . this means that the *advantages* or *consumer's surplus* got by spending £100 in England . . . .," and again, "the total of all these surpluses," (meaning consumer's surpluses), "is the extra *benefit* he gets from his conjecture," and so on. But I have already shown that according to Marshall the consumer's surplus is only the 'economic measure' of the 'surplus satisfaction,' and therefore as much different from it as a barometer is from the weather. I have not then argued, as Dr. Gopal seems to think, that 'surplus satisfaction' is possible only in any one commodity. Nor even have I argued that there are no consumer's surpluses for different commodities when taken separately. All that is suggested is that in the sense in which Marshall conceived of and calculated consumer's surplus, it is not possible to think of a consumer's surplus for a number of commodities *taken together*.

[15] *Economica*, 1924.

Dr. Gopal claims that the term, "other things being equal," means only that Marshall is making use of his "familiar statical method." I do not dispute the usefulness of the static method. But even for purposes of a study, we cannot think that conditions are static and at the same time that conditions are not static. When we calculate the consumer's surplus of a commodity we do so on the assumption that 'other things remain equal,' that is, as Dr. Gopal points out, conditions of demand, supply, price, in fact, everything about every other commodity remain without change, and that the price of that commodity alone rises to scarcity value. We might then reasonably put down 50 cents as the price that might be paid for the 1st orange as Taussig does, or 20 sh. as the price that might be paid for the 1st lb. of tea as Marshall does. But when we are thinking of the consumer's surplus for a number of commodities *taken together*, we are thinking of the difference between the total amount actually paid for them and the total amount that might have been paid if everyone of these commodities, and *not merely one of them* had risen to their 'scarcity values.' How is it possible to think that all commodities rise to their scarcity values, and at the same time that only one of them rises to its scarcity value? It is only in this sense that I have stated that there is a contradiction in terms. But my contention that there is no such thing as a consumer's surplus for all commodities taken together is not to be taken in the literal sense. The difference between a man's total resources and the sum he has actually paid for the purchase of different commodities bought, is in the literal sense the consumer's surplus for all commodities taken together. But this is very much different from, in fact, it will be only a fraction of, what we obtain by adding together the figures obtained by calculating on the Marshall plan the consumer's surplus of each commodity taken separately. When the consumer is faced with the prospect of paying the highest possible prices, not merely for the first units of one commodity, but for the first units of every commodity he wants to buy, then indeed, is the highest offer for the first unit itself bound to be revised considerably. Instead of then offering 20 sh. for the 1st lb. of tea rather than forgo its use, he

will be obliged to reduce the highest demand price to say 10 sh. or even to a much smaller amount, for the simple reason that he has to spread his resources over a number of commodites. The maximum potential prices offered for the various units of a commodity would then be very much different from the maximum potential prices offered for the various units of the same commodity, when instead of taking the commodity separately, we group the commodity along with other commodities and conceive of the consumer's surplus of all the commodities taken together. To conclude, Marshall's static method and the assumption in calculating the consumer's surplus of a commodity that its price alone rises to scarcity value prevent us from making use of and adding the *figures so obtained* in constructing a consumer's surplus for a number of commodities taken together.

When we say that a man having an income of £100, and spending it on the purchase of different commodities gets a consumer's surplus of £1000, what we mean or ought to mean in accordance with Marshall's definition of consumer's surplus is that the individual might have paid a £1000, in excess rather than forgo the purchase of the different commodities. To the question whether any man in England or Africa could ever offer an extra £1000, when his income is only £100, neither Marshall nor Dr. Gopal has given a straight answer. When a £100 become worth more than a £1000 to the same person in the same place and at the same time, it ceases to be an economic phenomenon; rather it becomes a magic performance. Marshall's comparison of a man in England with another in Africa and his reference to the benefits derived from a bridge do not constitute an answer to the point raised. His answer is, however, suggestive—suggestive of the fact, that here, he has suddenly reverted to the consideration of his primary and more important idea of a "surplus satisfaction." Just as some persons feeling a momentary strain, at times involuntarily peer over the spectacles instead of through them, here, Marshall, while still holding the consumer's-surplus apparatus in his hands, looks straight at the 'surplus satisfaction' instead of through the dusty lens of the apparatus.

The doctrine of dynamic satisfaction[16] is enunciated to explain the apparent inapplicability of the concept of consumer's surplus to necessaries and conventional necessaries. To appeal to the experience of the common man and to say that obviously the concept cannot apply to necessaries, is not to provide any enlightenment to the common man. A science must not merely take note of facts, but also seek to explain facts Nicholson has pointed out that even when applied to comforts and luxuries there is a certain degree of unreality about the concept. Only, the unreality becomes too glaring to be ignored when it concerns necessaries. An explanation which seeks to exclude a certain section, just because the defect has become too obvious is certainly not an explanation at all. If a better explanation than the doctrine of dynamic satisfactions can be found it would be quite welcome. But the need for an explanation cannot be denied.

Dr. Gopal asks whether there is anything like a just and proper price 'which is the correct price.' I have not stated that there is any such 'correct price.' I have only referred to the price which *the consumer considers* to be the just and proper price. According to Dr. Gopal no price would be considered just and proper by any consumer. This is a matter of personal experience and it is not possible to argue about it. For my part, I frequently hear statements made by consumers such as, "I had to pay a high price," or "I got it for a very low price," statements which imply that there is a price which the consumer would consider to be neither high nor low, that is, a price which he would consider to be just and proper. Clarity of thought is absolutely essential in such discussions where popular phrases are freely drawn upon and attempts made to prove the reality of certain concepts by what Taussig calls their 'accord with familiar phrases.' Unless we define and draw distinctions between terms which appear to be similar like 'consumer's surplus,' 'psychic surplus'[17] and 'surplus' satisfac-

[16] Discussed in detail in the *Indian Journal of Economics*, January, 1939, p. 418-419.

[17] *Ibid.*, p. 418.

tion,' we may confuse between ideas which are fundamentally different. 'Surplus satisfaction' itself is capable of two interpretations. Seligman[18] has pointed out that there can be only one surplus, *viz.*, the surplus of utilities over effort or cost. Though Seligman's analysis is more consistent and logical, it is barren of conclusions which are of any theoretical or practical importance. Further I have concerned myself with Marshall's ideas, and his 'surplus satisfaction' has nothing to do with cost or effort. That it is identical with the Marginal Surplus of Utilities and that it arises out of Marshall's perception of a total utility which is out of all proportion to the marginal utility is clear from references scattered throughout his discussion such as, "we cannot trust the marginal utility of a commodity to indicate its total utility,"[19] and, "the total utility of salt to him is very great indeed, and yet its marginal utility is low."[20]

K. J. MATHEW THARAKHAN.

[This controversy is now closed—M.E.]

Co-operative Movement in Assam

(A NOTE FROM THE REGISTRAR OF CO-OPERATIVE SOCIETIES, ASSAM)

I. Existing State of the Co-operative Movement in Assam.

(*a*) *Provincial Co-operative Bank*:—At the head of the Co-operative Financing Institutions in this province is the Provincial Co-operative Bank of Assam Ltd. which was registered in 1921. The Bank has 33 preference and 51 ordinary members, the latter of whom are all registered

[18] Seligman's *Principles of Economics*, 7th edition, p. 194—203.

[19] *Principles*, p. 129.

[20] *Ibid.*, p. 129.

Co-operative societies. The Bank issues loans to co-operative Central banks and other urban societies with limited liability. Formerly it advanced loans to village credit societies as well but this has now been stopped. The present position of the Bank is sound though it has not made much headway. In fact it compares poor when in comparison with other sister institutions of various provinces. The present working capital of the bank is Rs. 3,67,186 which is smaller than that of some of the Central Banks of the province. The rate of interest charged by the bank on fixed deposit is 3 to 4% and that of lending is 6%.

(*b*) *Central Banks*:—Total number of Co-operative Central Banks in the province is 18. They finance generally agricultural credit societies with unlimited liability but not individuals. The Central Banks have 674 individuals and 1191 society members. The total working capital is Rs. 23,56,745 which consists of shares (Preference and Ordinary) and deposits (fixed, Savings and Current) received from members and non-members. Fixed deposits are for varying periods from 1 to 4 years and the rate of interest paid is 4 to 6% and interest charged to village credit societies is 9%. In the pre-depression period the rate of interest on deposits and lending was much higher and has now been reduced. There was a time when Central Banks enjoyed prosperity but the slump in prices of agricultural produce and fall in value of landed property have retarded their progress. Besides, the introduction of Assam Money Lender's Act and Debt Conciliation Act and their application to co-operative societies have also badly hit some of these financing Central Institutions. Due to fall in recovery from rural co-operative credit societies on account of the economic depression and other legislative measures, the Central Banks are finding it difficult to meet their obligations to the depositors (and had to fall back on the resources of the Provincial Co-operative Bank).

(*c*) *Agricultural Credit Societies*:—These rural credit societies were started with the idea of rendering financial assistance to agriculturists at reasonable rate of interest and to keep them from the clutches of usurious money-lenders. These credit societies are all on unlimited liability and al-

most all on share basis. According to the latest Government report the number of these credit societies is 1,289 with a membership of 42,219. Total loans from individual members to societies stood at Rs. 17,81,114 for 1937-38. The credit societies have been financed with loan from some local Central Bank to which those are affiliated. The loans were given mainly for periods of 3 to 4 years and were mostly on personal security. The usual rate of interest was $15\frac{5}{8}\%$. Since the days of depression the collection of interest and principal of loans from the credit societies have been falling off year after year and as much as 94% of the loans are now standing overdue. Most of the credit societies are now running at a loss due to the application of the Assam Moneylender's Act and the Assam Debt Conciliation Boards to the co-operative societies in the province. The position does not show appreciable signs of improvement and will take years to clear up the position which presents accumulated overdues of several years in the past. To revitalise the village credit societies fresh financing for legitimate current agricultural needs, and remission of interest or principal as may be necessary, will have to be applied in large scale. For improvement of repaying capacity of members and thus to reduce their indebtedness the Department is rendering help to members of rural credit societies to supplement their agricultural income by taking up of subsidiary occupations. The weaving and sericultural departments are co-ordinating with the department in introducing weaving and sericulture in selected locality.

(*d*) *Non-Agricultural Credit Societies*:—Total number of these societies is 112, with 13,337 members and working capital of Rs. 26,42,249. There was all-round progress in the working of these societies.

(*e*) *Land Mortgage Banks*:—Number of Land Mortgage Banks is 5. These banks were started to provide a machinery of credit for issuing long-terms loans to landowners and agriculturists and to reduce their past debts. The working capital of these banks was secured from shares, deposits for fixed periods of 3 to 5 years and advances from Government. The loans were issued to

individuals on the security of their immovable properties and were for 10 years. Due to the depression the assets of these banks became frozen and the banks are now taking coercive measures to restore their position. (These banks could not meet depositors' demands and have lost all public confidence). The working capital of these banks for 1937-38 was in total Rs. 4,79,381.

(*f*) *Non-credit Societies*:—(i) *Store*:—The Stores movement has not been popular here and many had been liquidated in the past. Total number of this kind of societies is now 11 of which 3 worked at a loss last year.

(*ii*) *Milk Societies*:—Total number of milk societies is 20. These societies are gradually closing down.

(*iii*) *Land Improvement Societies*:—There is only one Land Improvement Society in the province which is protecting paddy fields of members from annual flood and ravages of water hyacinths.

(*iv*) *Mutual Benefit Societies*:—There are 5 such societies some of which are making steady progress.

(*v*) *Village Welfare and Better Living Societies*:—For the uplift of rural masses village welfare societies are being started and their members are on the increase. Total number of this kind of societies is 13.

(*vi*) *Women's Co-operative Societies.*—There is one pure thrift and savings society among women registered in 1937. Its business is steadily on the increase. Home saving boxes are supplied to individual members and the total savings made therein are collected every month and deposited in the account of the members concerned.

(*vii*) *Fishery Societies*:—There are two such societies one of which attained considerable success.

II. The Law on which it is based:—

Assam has not yet got its Provincial Co-operative Act and is under the All-India Co-operative Societies Act 2 of 1912 and the Provincial rules framed under section 43 of the Act. The proposal for having a separate Act for the

province for better working is under consideration of the Government.

III. The facility that the provincial Government or State affords the movement and the success so far attained by the movement in the various fields of its activity.

As elsewhere the co-operative societies started in the province were mainly for supply of credit to rural agriculturists. Since the starting of the Co-operative Central and Provincial Co-operative Banks for financing of village credit and other societies the practice of direct state financing of co-operative societies has ceased. Government, however, grant annual contribution towards cost of maintenance of Supervisors of Central Banks. At the initial stage of the Co-operative Land Mortgage Banks Government granted advances to these Banks. Besides for encouragement of industries in selected locality and maintenance of adult night schools by co-operative societies, Government also make annual contribution to co-operative societies or Central Banks as may be required. (The amount of such Government assistance has been falling off year after year in view of financial difficulties).

The supervision and audit of Co-operative Societies is done by Government through the Co-operative Department. At the head of it is the Registrar of Co-operative Societies who is also the Director of Industries. There are two Assistant Registrars, one auditor, 15 Inspectors of Co-operative Societies. The Inspectors have to do inspection, organisation, liquidation etc., besides audit. As there is no separate audit staff in the province the statutory obligation of the Government is proving a heavy burden on the existing inadequate co-operative staff. The creation of a separate audit staff is under consideration of the Government and if this is given effect to, Circle Inspectors will be relieved of this work and the movement is likely to show better results.

A formula for limits of variations in a weighted Index due to a new series of weights

The present formula is intended to indicate the limits of variations which the application of a new series of weights to a given series of unweighted indices might produce in the weighted index calculated from a given series of weights applied to the same unweighted indices. For example, a weighted cost of living index may be worked out for the whole population of a certain centre, and it may later be found necessary or desirable to work out similar indices for certain sub-groups of that population separately. In such a case, while the price-indices will remain the same, weights for the different sub-groups might differ. With the aid of the present formula it should, however, be possible, without actually working out the weighted general indices for the different sub-groups, to determine the limits of deviations, positive or negative, which these indices may show from the general weighted index already computed.

2. Let w denote a given series of percentage weights corresponding to a given weighted index I and w' a new series of percentage weights. Let I′ be the new weighted index corresponding to w'.

Then, if p denote the series of unweighted indices for individual items and n be the number of items,

$$\mathrm{I}=\frac{p_1\omega_1+p_2\omega_2+p_3\omega_3+\ \ldots\ +p_n\omega_n}{\omega_1+\omega_2+\omega_3+\ \ldots\ +\omega_n}={}_1^n\Sigma\ p\ \omega \quad \ldots \quad (1)$$

$$\text{and } \mathrm{I}'=\frac{p_1\omega_1'+p_2\omega_2'+p_3\omega_3'+\ \ldots\ +p_n\omega_n'}{\omega_1'+\omega_2'+\omega_3'+\ \ldots\ +\omega_n'}={}_1^n\Sigma\ p\omega' \quad \ldots \quad (2)$$

so that

$$\mathrm{I}-\mathrm{I}'=\frac{1}{{}_1^n\Sigma\omega}\Big\{p_1(\omega_1-\omega_1')+p_2(\omega_2-\omega_2')+p_3(\omega_3-\omega_3')+$$

$$\ldots+p_n(\omega_n-\omega_n')\Big\},\ \text{for } \Sigma\omega=\Sigma\omega'=100,$$

$$=\left({}_1^n\Sigma\ p\ \delta\right)\Big/{}_1^n\Sigma\ \omega,\ \text{where } \delta_r=\omega_r-\omega_r' \text{ generally} \ \ldots \quad (3)$$

Since the two series of weights, w and w', are not identical (by hypothesis), some δ's will be positive and

others will be negative (while some may be equal to zero). Let ${}_p\delta$ denote the positive δ's and ${}_n\delta$ the negative δ's and let n_1 and n_2 be their number respectively.

Then

$$\sum_1^{n1} {}_p\delta - \left|\sum_1^{n2} {}_n\delta\right| = ({}_p\delta_1 + {}_p\delta_2 + {}_p\delta_3 + \ldots + {}_p\delta_{n1}) - |({}_n\delta_1 + {}_n\delta_2 + {}_n\delta_3 + \ldots + {}_n\delta_{n2})|$$

$$= (\omega_1 + \omega_2 + \omega_3 + \ldots + \omega_n) - (\omega_1' + \omega_2' + \omega_3' + \ldots + \omega_n')$$

$$= 0;$$

i.e., $$\sum_1^{n1} {}_p\delta = \left|\sum_1^{n2} {}_n\delta\right| \quad . \quad . \quad . \quad (4)$$

Let ${}_pp$ and ${}_np$ denote respectively the series of unweighted indices corresponding to ${}_p\delta$ and ${}_n\delta$.

Then, from equation (3) above,

$$(I - I') \times \sum_1^n \omega$$

$$= p_1\,\delta_1 + p_2\,\delta_2 + p_3\,\delta_3 + \ldots + p_n\,\delta_n$$

$$= \{({}_pp_1\,{}_p\delta_1 + {}_pp_2\,{}_p\delta_2 + {}_pp_3\,\delta_3 + \ldots + {}_pp_{n1}\,{}_p\delta_{n1}) - |({}_np_1\,{}_n\delta_1 + {}_np_2\,{}_n\delta_2 + {}_np_3\,{}_n\delta_3 + \ldots + {}_np_{n2}\,{}_n\delta_{n2})|\}$$

i.e, $$(I - I') \times \sum_1^n \omega = \sum_1^{n1} {}_pp\,{}_p\delta - \left|\sum_1^{n2} {}_np\,{}_n\delta\right| \quad . \quad , \quad . \quad (5)$$

Let equation (5) be considered under two cases—(1) when $I - I'$ is positive (*i.e.*, the new weighted index is lower than the given weighted index), and (2) when $I - I'$ is negative (*i.e.*, the new index is higher than the given index).

Case (1)

When $I - I'$ is positive, it will have its greatest value when

$$\sum_1^{n1} {}_pp\;{}_p\delta \quad \text{is greatest}$$

and $$\left|\sum_1^{n2} {}_np\;{}_n\delta\right| \text{is smallest}$$

Let ${}_pp_g$ and ${}_np_s$ denote respectively the greatest value amongst ${}_pp$'s and the smallest value amongst ${}_np$'s.

Then, δ's being constants, the greatest value of $I-I'$

$$= \frac{1}{\sum_1^n \omega}\left\{{}_pp_g \sum_1^{n1} {}_p\delta - \left|{}_np_s \sum_1^{n2} {}_n\delta\right|\right\}$$

$$= \frac{1}{\sum_1^n \omega} \times \left(\sum_1^{n1} {}_p\delta\right) \times ({}_pp_g - {}_np_s),$$

$$\because \sum_1^{n1} {}_p\delta = \left|\sum_1^{n2} {}_n\delta\right| \text{ from } \quad . \quad . \quad . \quad (4)$$

i.e., the maximum value of $I - I'$ $= \dfrac{\sum_1^{n1} {}_p\delta}{\sum_1^n \omega}({}_pp_g - {}_np_s)$

$$= ({}_pp_g - {}_np_s) \times c \quad . \quad . \quad . \quad (6{\cdot}1)$$

where c is a constant $\left(= \sum_1^{n1} {}_p\delta \Big/ \sum_1^n \omega\right)$

Case (2)

When $I - I'$ is negative, the maximum arithmetical value of $I - I'$ will be obtained when, from equation (5),

$$\sum_1^{n1} {}_pp \, {}_p\delta \text{ is smallest}$$

and $\left|\sum_1^{n2} {}_np \, {}_n\delta\right|$ is greatest

Therefore, proceeding as in case (1) above, if ${}_pp_s$ and ${}_np_g$ denote respectively the lowest value amongst ${}_pp$'s and the greatest value amongst ${}_np$'s, the greatest arithmetical value of $I - I'$, *i.e.*, the greatest value of $I' - I$

$$= ({}_pp_g - {}_pp_s') \times \frac{\sum_1^{n1} {}_p\delta}{\sum_1^n \omega}({}_np_g - {}_pp_s) \times c \quad . \quad . \quad . \quad (6{\cdot}2)$$

where c is a constant [the same as in equation (6·1)].

3. The maximum arithmetical difference between the given weighted index and the new index based on a new series of weights is given by equation (6·1) when the new index is lower than the given index, and by equation (6·2) when the new index is higher than the given index. The

entire range of difference between two new weighted indices is therefore given by combining the two measures of maximum difference, *i.e.*, by—

$$\{({}_pp_g - {}_np_s) \times c\} + \{({}_np_g' - {}_pp_s') \times c'\} \quad . \quad . \quad . \quad (7{\cdot}1)$$

or by $\{({}_np_g - {}_pp_s) \times c\} + \{({}_pp_g' - {}_np_s') \times c'\}$ . . . (7·2)

whichever of (7·1) and (7·2) be greater.

The full significance of the expressions (7·1) and (7·2) deserves to be explained further. If two new weighted indices, I'_1 and I'_2, are worked out on the basis of two new series of weights, w'_1 and w'_2, respectively, the maximum arithmetical difference between the given weighted index (I) and either of the new indices (I'_1 and I'_2) is given by the expression (6·1) or (6·2) but the maximum possible arithmetical difference between these two new indices (I'_1 and I'_2) themselves will be given by the expression (7·1) or (7·2).

4. The expressions (6·1) and (6·2) give the maximum arithmetical difference between I and I′ without, it may be pointed out, telling when actually I may be greater (or smaller) than I′. The condition for this is given by the following:—

$$I \gtrless I'$$

according as $\sum_{1}^{n1} {}_pp\ {}_p\delta \gtrless \left| \sum_{1}^{n2} {}_np\ {}_n\delta \right|$ . . . . (8)

The above statement may not, however, be of much use in practice as the saving in calculation will be negligible. Whether $I - I'$ will be positive or negative can, however, also be definitely indicated if the smallest value amongst either ${}_pp$'s or ${}_np$'s is known to *exceed* or *equal* the greatest value amongs the other series (${}_np$'s or ${}_pp$'s respectively).

Thus, if ${}_pp_s \geq {}_np_g$,

then $I - I'$ is positive and the maximum difference between I and I′ is given by (6·1) and the minimum difference by

$$({}_pp'_s - {}_np_g) \times c \quad . \quad . \quad . \quad (9{\cdot}1)$$

Similarly, if $_{n}p_{g} \gtrless {}_{p}p_{g}$,
then $I - I'$ is negative and the maximum arithmetical difference is give by (6·2) and the minimum arithmetical difference by $({}_{n}p - {}_{p}p) \times c$ (9·2)

While the above formulae for the positive or negative character of the difference between I and I′ will, if applicable, certainly save time and calculation, it is doubtful if the conditions on which they are based will, in general, be found fulfilled in practice.

J. K. PANDE.

A Socio-Economic Survey of Pano Akil Taulaka

Pano Akil Taulaka is in the Sukkur District of Sind Province. It is in the non-barrage zone. It covers an area of 393 square miles, spread over nearly a hundred villages.

A socio-economic survey of this Taulaka makes a very interesting study. Its population, as the Table below shows, has increased by 331% during the last fifty years.

1891	10,974
1901	22,766
1911	45,581
1921	41,479
1931	47,287

There is no statistical evidence regarding production. But local evidence conclusively proves that agricultural production has considerably increased due to the construction of the canals, sinking of tube-wells and settled conditions of life due to British Rule. The increase in agricultural production is proved from the increase in land revenue from Rs. 75,000 in 1918 to 1,40,000 in 1935, though there has been no change in the rate of assessment,

Half a century ago this Taulaka was largely desert. Cultivation depended upon floods. The place was a cockpit of crime. There is now a considerable reduction in crime due to better economic conditions and better administration. There was hardly any industry, except that of shoe-making, which depended upon the local market. Today this small Taulaka has two rice mills, one aerated water factory and three leather factories. These leather factories get their raw materials from the Punjab and export finished kid skins to Europe.

Half a century ago, there was not a single school, no dispensary, no library, no Post Office, no Local Administration, no sanitation, not even a place of recreation. Now, there are eight Schools, a Government dispensary, a library, a Post Office, a Local Board and a Club. Several roads have been constructed. Pano Akil today is a much better, healthier and more prosperous place than it was 50 years ago.

Agriculture

A part of this Taulaka is still a waste. Out of the total area of 252,732 acres, only 86,000 acres (*i.e.*, 34% are cultivated, 60,000 acres (nearly 24%) are available for cultivation, but at present uncultivated. 65,000 acres (*i.e.*, 26%) are covered by forest, and the rest 41,000 acres (nearly 16%) are totally uncultivable. Agricultural production can be nearly doubled, if the cultivable waste of 60,000 acres is brought into the plough. But tube wells will have to be constructed before this can be done. Technical advice and a little encouragement from the Government Agricultural Department will be sufficient to induce the land-owners to extend their enterprise. Most of them have a lot of money, but have no ideas nor any organising ability.

Irrigation

More than half the area cultivated depends upon irrigation, as the average annual rainfall is about an inch only. The irrigated area covers 23,000 acres, the non-irrigated

20,000 and the fallow 44,000 acres. Five State canals irrigate 18,000 acres, and 2,000 private pucca wells irrigate about 4,000 acres. The crops which have benefited from irrigation are wheat, jowar, bajhar, gram, fodder and oil seeds. The wheat area has increased since 1918 from 10,000 to nearly 20,000 acres, the jowar area from 7,000 to 14,000 acres, the bajhar area from 450 to 1,400 acres, the gram area from 100 to 1,500 acres, the fodder area from nil to 25 acres, the oil seeds area from 600 to nearly 3,000 acres. Production has more than doubled due to this increase in the area under cultivation. There is not much evidence of any considerable increase in production due to better methods of cultivation or better seeds. Irrigation has benefited fruit gardening also. Fruit trees have increased five times, from 40 to nearly 200 during the last 20 years.

Cattle

This Taulaka possesses about 20,000 heads of cattle, whereas 30 years ago it had nearly 40,000. Cattle population has been halved. It is now better fed but the quality is not any better. Cattle is required mainly for lift-irrigation. Milk and butter are considered to be subsidiary products.

Oxen and he-buffaloes are used for ploughs. Oxen have decreased from 13,000 to nearly 8,000 during the last 35 years. Bull-buffaloes for breeding purposes have completely disappeared. Bulls for breeding have decreased from 80 to 20, cows from 12,000 to 6,000, and she-buffaloes from 35,000 to 2,000. People now-a-days prefer she-buffaloes to cows. Goats alone maintain their number at about 13,000. Horses, sheep, donkeys, camels—all have decreased in number. On account of the decrease in the number of the cattle, the cost of production has considerably declined. Thirty years ago a pair of plough cattle used to work an area of about 5 acres; now they work over nearly double the area. The farmer now maintains only half the number of cattle, but he takes twice the work from each head. The cattle are now not so necessary for crop pro-

duction, as canal and tube-well irrigation are superseding lift-irrigation.

The Holdings

The total cultivated area is divided in more than 7,000 holdings, of which more than 4,000 are under 5 acres, and only 11 over 500 acres. In between, we have about 2,500 holdings of 5 to 25 acres, 350 of 25 to 100 acres and about 50 of 100 to 500. Consolidation and sub-division of holdings are both increasing at the wrong ends. Ambitious landlords are increasing the area under their sway, and small holders are parting with petty fragments of land. There is no movement for consolidation of small holdings.

Agricultural Finance

The main source of rural credit is the village money-lender. He keeps his business absolutely secret, unless the matter goes to Court. His rate is pretty high; but, now-a-days, he is very reluctant to give credit. The total amount of credit advanced by the money-lender cannot be ascertained without State authority.

The Co-operative Societies are total failures. The members look upon them as State Charitable Institutions. There are 8 of them, one in each of the following villages:—Pano Akil, Dadlo, Bhelar, Chechro, Hingoro, Panhwari, Soomra and Sadoja. There are about 250 members in all these Societies. Almost all of them have become members, not to co-operate with each other for social and economic purposes, but just to get other people's money at cheap rates. There is no other form of co-operation, except for credit. The Secretary told me that they needed 'seeds' and 'sales' co-operative societies. He did not mean that they should co-operate to procure better seeds, nor did he mean that they were to make any effort to organise the marketing of their produce. He meant that the State in the name of co-operation should supply them free seeds and arrange for the marketing of their produce. Most of the members seem to me to be bankrupt, to whom nobody else was giving credit. We cannot, by co-operation, make bankrupt people solvent,

just as idiots cannot, by sitting in a body, become suddenly wise. The entries to the credit of the members in the books of the co-operative societies seem to me to be fictitious. Each member has purchased a share of Rs. 20 payable in easy instalments of Rs. 2; but from local enquiries, it was apparent that even this small instalment was paid from loans, contracted from the Co-operative Societies themselves. Loans to members are, according to rules, given to the extent of 1/5th of their landed property. This rule is not observed. The maximum loan does not exceed Rs. 500. Interest is calculated at the rate of 0-14-7% p.m., *i.e.*, about 11%. It has now been reduced to $7\frac{1}{2}$%. The co-operative societies were closed for 3 years, from 1930 to 1933, as sums borrowed in 1926 had not been paid; still they have not been paid. Even interest has not been fully recovered. The credit societies have invested about Rs. 7,000; but there is no likelihood of recovering the money.

The main cause of the failure of the co-operative movement is that co-operation is regarded as a Government affair. The peasants, so the Secretary told me, are "afraid of Government money." The debtor has to sign a mortgage-deed with the Society. If the money is not regularly paid, the Supervisor issues the decree. There is no Civil Court to protect the debtor by the dilatoriness of its proceedings. The cattle are put in the lock-up for failure of payment and then sold for Rs. 5 when they are worth Rs. 50. The money-lender is lenient. He accepts cattle instead of money; but he is only a pleasant enemy. A suitable organisation of rural credit can only be evolved after the liquidation of illiteracy, and a suitable settlement of old debts. These old debts cannot be paid, under any circumstances. They exist only on the money-lenders' books. It will be to his benefit, if they were considerably scaled down.

Manufacture

There are two rice mills, one aerated water factory, and three leather factories. There is nothing remarkable about the rice mills or the aerated water factory, which have now

appeared everywhere. But the leather factories struck me as very well-organised, and their managers, Punjabi Mohamadans, most enterprising. One is rather a small factory, with one proprietor, who is also the manager, working with four labourers. He was rather very reluctant to let me into the secrets of his business and all that I could get out of him was that his cost of production of finished leather is about Rs. 15 per maund and selling price Rs. 30 per maund. He looked rather very affluent. Local men, who out of envy, exaggerated the income of their more prosperous neighbour, put his income at Rs. 3,000 a year. In my opinion it could not be more than Rs. 1,500 to Rs. 2,000.

The proprietor of the bigger factory was an easier man, as he was a producer on a large scale, he indulged in lies, also, on a large scale. His investment, he told me, was about Rs. 15,000. I walked round the factories, examined everything carefully and subsequently asked the local people. The investment was hardly of Rs. 500. He divided his cost of production as under:—

1	Raw hide	Rs.	16/-	per	maund
2.	Bark of a particular tree, imported from Ambala	„	2/-	„	„
3.	Dies	„	2/-	„	„
4.	Lime	„	5/-	„	„
5.	Labour (piece rate) ...	„	3/-	„	„
		Rs.	28/-	per	maund.

Raw hides, from local enquiries, appear to be cheaper, the rate per maund ranging from Rs. 3 to Rs. 10 according to quality. The proprietor actually does not pay his labour as well, as he told me. He employs 8 men, of whom 5 are Muslims and 3 depressed class Hindus. Caste Hindus do not like to handle hides and their labour is very dear. The labourers seem to be very poorly paid and *very* poorly treated.

The proprietor told me that they were producing about 500 maunds a year and selling at Rs. 40 per maund. He makes a profit, inclusive of interest, of Rs. 12 per maund,

in all Rs. 6,000 a year. This does not look to be an under-estimate, because he is said to have come from the Punjab, some 25 years ago, a penniless man; now he is big land-owner and money-lender. He is an expert enterpriser. The kid skins and sheep skins, that he showed me, were simply excellent. It is he who has trained his labourers to make such materials.

Trade

Wheat is the principal commodity which is exported to Europe *via* Karachi. The following statistics, collected from the returns of Pan Akil Railway Station, are worth study:—

Year	Wheat	Oil seeds	Total Export	Total freight
	Maunds	Maunds	Maunds	Rs.
1926	117,190	*n i l*	319,462	97,620
1927	118,894	*n i l*	266,720	76,955
1928	50,940	*n i l*	173,996	34,107
1929	10,833	*n i l*	133,882	34,793
1930	50,599	1,414	182,768	45,382
1931	65,729	1,894	223,018	86,455
1932	32,902	1,099	220,852	57,751
1933	74,129	2,981	82,432	83,434
1934	82,103	1,100	275,000	144,239

The effects of the depression as well as the slow progress of subsequent recovery are obvious.

The Standard of Living

The standard of living in Pano Akil town itself is quite high. There are no less than 60 shops which cater for the various needs of its inhabitants. The richest people are the Hindu Marwadi shoemakers, who are also money-lenders. Five of them are said to possess 6 to 10 thousand rupees.

Out of 200 buildings 15 are made of pucca bricks. There are 10 ordinary wells, and 35 tube-wells in the town itself. In the 100 villages around Pano Akil, the standard of living is very low. The diet is substantial, but the housing is extremely poor.

D. J. Sind College, Karachi. D. H. BUTANI.

Survey of Rural Indebtedness in India—A Comment

In No. 80 of the INDIAN JOURNAL OF ECONOMICS, Dr. B. G. Ghate has outlined a scheme for the survey of rural indebtedness in India with a view to make the collection of data more scientific and more light-bearing. This is indeed a very important subject, and the following observations are made on the strength of about nine years' field work experience.

The Compiling Agency

How should the actual compilation of the data be done, and who should do it at the primary stage? The usefulness or otherwise of any inquiry will largely depend on the accuracy of the date. Checking and the application of statistical methods are all right, but they resemble injections and surgical operations which depend for their beneficial effect on the vitality of the patient's heart. Dr. Ghate recommends that Revenue officials should be deputed for this work with ready-made forms and, after the data are compiled, he proposes to entrust the work of checking to a committee. He also proposes that the compilation should be from door to door. Even the Bowley-Robertson suggestion is that each village should be investigated into by a separate investigator for a year (of course the inquiry to include many other items than debts), but it is clear that they intend the deputation of trained men for this work. Dr. Ghate does not make it clear whether the deputed Revenue officials

should be part-time or whole-time, but even presuming that they should be deputed to the work whole-time, two considerations would have to be given due weight before expecting satisfactory work from that agency. Firstly, the process of inquiry is a laborious one requiring a special amount of technical knowledge, patience, tact and sympathy if the truth should be got at, and it is not at all certain that in every Revenue official selected at random, such qualifications could be got at. Secondly, Revenue officials would invariably tend to depend on the village officials for the information, and both the deputed officials and the village officials must be reasonably expected to cherish certain set axiomatic beliefs, and such beliefs are bound to vitiate the debt survey considerably. For instance, although there is no connection really, neither the village official nor the Revenue official would like the idea of making it plain that in his respective jurisdiction rates of *real* interest were high or that village records were highly defective, or that the village officials were largely responsible for many individual cases of injustice regarding landholding, money-lending, etc. In an inquiry held under the direction of Mr. S. M. Bharucha, Additional Revenue Secretary, Hyderabad, recently on the debt burden on land, although the entire Revenue Department was at his disposal, and although the Tahsildars were expressly directed to camp in the concerned village and scrutinise the figures compiled by the village officials, and although it was claimed that such figures were checked by higher officers, Mr. Bharucha himself has said in his Report that out of 55,027 occupants of land in 312 villages selected for the purpose, as many as 4,177 landholders could not be got at, and neither Mr. Bharucha nor the student interested in the inquiry is able to know what sort of people were the absentees. All inquiries into the burden of debt on land naturally proceed on land in the village as the basis, and in the usual state of affairs, several landholders live far away from their lands specially absentee landholders. Would it be safe to assume that their lands were debt-free? Would it be safe to assume that they were either large holders or small holders as a lot? This inability to reach such a substantial number must have been due to the fact that the

collection of primary data was done by the Revenue officials, and they naturally thought that if some people could not be got at, it did not matter at all. But for an inquiry to be thorough, it does matter even if a handful of the concerned people slip out. Then with regard to the quality of the data: Mr. Bharucha has himself admitted that "many agriculturists' debts were not correctly reported . . . . A large amount of pattedars' debt was not disclosed during the inquiry for personal reasons."

The Village Ecclesia

It is rather lucky that in villages in India, the spirit of individual liberty has not yet spread so far as to persuade the generality of them to non-co-operate with such inquiries. An urban debt inquiry could not be anything like thorough without special legal sanction and the levy of a penalty on refusal to give correct answers. Even the Census of India depends for its thoroughness on a special law enacted for the purpose. But in villages, there are no secrets, and the best way to get at correct information is to gather the ecclesia of the village and *first* explain in the local language the *why* of the inquiry, and then earn the sympathy of the population. The compilation and the verification both run concurrent: the occupant and the tenant, the employer and the labourer, the debtor and the creditor, and the village elders—all are there and each householder would realise the uselessness of any attempt to screen or misrepresent facts. Of course, every household in the village should be covered, but a door to door method, while it might have the apparent merit of affording some secrecy to the data given, would lack in accuracy for want of the automatic verification process that would take place before the village *ecclesia.*

Occupant, Tenant and Labourer

Dr. Ghate uses the rather vague term "cultivator" and distinguishes this from the agricultural labourer. In the "forms" suggested by him, there is no distinction between occupant and tenant: the two are indifferently clubbed together. Now, the object of any inquiry into indebtedness

should be to get at facts as analytically as possible so that suitable remedial measures could be suggested or resorted to. From this view-point, an agricultural tenant stands quite on a different footing from an occupant-cultivator or an absentee landholder: whether in *zamindari* or in *raiyatwari* lands, the tenant's rights on the land, of mortgaging or of selling, differ from those of the occupant, and a primary condition for avoiding confusion is to have three separate sets of figures—for occupants, for tenants and for labourers. Of course, if an occupant cultivates his land and in addition cultivates others' lands as a tenant, data with regard to that would go under additional income. In *raiyatwari* lands, most of the tenants are tenants at will, having no kind of rights on the land, and it would be quite pointless to enlist them along with occupants of land who have full rights of mortgaging or selling the land.

"Area of Land"

Dr. Ghate has made a very important omission by speaking of the area of land, the area of the holding, etc. Wet, dry and garden land belong to different categories altogether, market value differs, as also working expenses and yields. The phrase "debt per acre" is misleading as in a holding in which wet land preponderates, the debt per acre may appear to be higher than in another holding in which dry cultivation predominates although the incidence of debt might be really lighter in the first than in the second case. The fruitful comparison should be between the market value of the land and the size of the debt secured by that land. In areas in which special crops are grown like coffee, or tea, a fourth class would have to be made as land revenue assessment, expenses of cultivation and size of the yield, marketing facilities and *real* incomes differ in the case of special crops.

Costs, Yields and Debts

On page 14, Dr. Ghate has tried to suggest that data should be collected with a view to enable us to gauge the incidence of debt, but the difficulties in the way have not

been stressed by him. With present-day erratic seasonal conditions and sudden and wide fluctuations in prices of primary products, with current levels of efficiency in cultivation, with a complete absence of crop and cattle insurance facilities, it would be extremely hard to get at normal or representative figures with regard to costs of production and sizes of incomes. Rather, such inquiries should be made by still better equipped technicians than either by the Revenue official or the general investigator who might have received some sort of training: the Gadgil inquiry conducted recently on farm costs is an instance.

The Schedules

The schedule headings and column headings require to be modified considerably. Dr. Ghate must mean the heading of the first schedule to be "the debt of each family in the village," but it is printed "the debt of each *individual* in the village." (Italics are ours) Col. 1 is headed "name of person." This should read "name of the head of the family." Column 3 jumbles together land revenue and rent. As explained *supra*, separate forms and separate registers should be used for occupants, tenants and labourers if confusion is to be avoided. Col. 8 stands: "amount of money paid towards debt repayment." It is difficult to understand what Dr. Ghate means by this. Does he mean the amount paid during the year previous to the inquiry, or does he want the figure beginning from Adam and Eve? For, the majority of debts run for generations, and if Dr. Ghate expects the average agriculturist to remember transactions over decades, there is a probability of his being disappointed. *The inquirer must adjust himself to the level of the mentality of his subject.* It may seem strange, but this is true that during an inquiry held by the writer of this article, several women in villages could not remember how many child births they were responsible for. The heading requires to be more analytical. Towards debt repayment, a debtor does often pay in kind, and it would be profitable to know how much was paid in cash and how much in kind (in terms of rupees) say, during the previous five years. Similarly, col. 9 would be more useful if broken up into

two sub-headings like "rate of interest paid in cash," "rate of interest paid in kind" and "total *real* rate of interest." Under column 10 dealing with objects of debts, a small list of probable causes would have to be laid down in which the "miscellaneous" would naturally loom very large: many a villager could not tell these things in detail.

Schedule II.

"The incidence of indebtedness" would have to be gauged differently in the cases of occupants, tenants and labourers. In the first case, the incidence would have an important relation to the value of the land, but in the latter two cases the only relation could be to the income. Thus, separate statements would have to be prepared for the three classes. Col. 2 must have sub-columns for wet, dry and garden (and if necessary, special) lands. Col. 5 would be meaningless even if transferred to a separate statement: "seasonal debt" for labourers could not have any meaning—unless things are meant like marriage seasons or drinking seasons. But here we are concerned with agricultural seasons, and the labourer does not incur any expenses of cultivation, being a labourer by hypothesis. Col. 7 as it stands does not carry any meaning: "distribution of debt according to size of holding" is too vague a heading. What kind of debt—secured by land, secured by other property, unsecured debt? Size of holding? Wet, dry or garden, or the value of the holding? "Debt per head"—is this debt per family indebted, per family whether indebted or debt-free, or *per capita*—taking into account only the indebted families or the entire population—comprising the land-holders? or the residents? A debt inquiry is not so simple and easy as Dr. Ghate appears to believe. Col. 11, (iii) "From money-lenders" is too big a genus: "cultivating money-lenders" and "non-cultivating money-lenders"—figures for these separately—would help in indicating the prospect of land transfers to non-cultivating classes.

The Central Problem

Really Dr. Ghate intends an economic inquiry, not a mere debt inquiry, and he is right. The purpose of any

such inquiry should be, after a thorough all-sided scrutiny, to analyse the agricultural population into several types requiring to be treated differently before a new start could be given. The ensuring of a real wage level corresponding to a standard of life considered reasonable for the labourer, the tenant and the cultivating occupant respectively, is the central problem, and we would be nearer the solution with more of basic, first-hand, telling statistics.

S. KESAVA IYENGAR.

ERRATUM

In the July, 1940, issue of the *Indian Journal of Economics*, a Note on "The Problem of Estimating Population of India during Intercensal Years" appeared under the name of D. N. Sen Gupta. The name of the Author should be read as *D. Sen Gupta* instead of D. N. Sen Gupta.

REVIEWS OF BOOKS

STATE BANKS FOR INDIA—by Anwar Iqbal Qureshi. Published by Messrs. Macmillan & Co. Ltd., London. 1939. Pp. 248. Price 12s. 6d.

By the State Bank, the author in this book does not mean a Central Bank of Issue but any bank doing either savings or commercial or land mortgage banking business, of which the capital is subscribed by the Government, or by the public with full government guarantee regarding payment of interest and repayment of capital, and of which the general policy is controlled by the Government.

The author begins by showing some of the serious gaps and shortcomings in the present banking structure of India and making out a very good case for new lines of banking development for the purpose of encouraging and mobilising national savings, on the one hand, and for financing land improvements, liquidation of old agricultural debts, long-term requirements of industries, and house-building for persons of moderate means, on the other.

The author's suggestions on all these matters are based on a close, and in some cases first-hand, study of the working of state banks and land-mortgage credit institutions in Australia, New Zealand, South Africa and the United States of America. He also gives a highly interesting account of the various methods by which some of the state savings banks of Australia have been endeavouring to stimulate thrift on a national scale, *e.g.* flexibility of rules regarding withdrawal of money, facilities for tourists, establishment of school savings banks where the teachers give honorary services, and starting of group savings clubs in factories and business houses. Some of these banks have also built up suitable machinery for giving special financial aids to rural industries. And we think there is much for India to learn from the methods and practices of the state banks in question.

The author ends up by suggesting a concrete scheme for the establishment of Provincial State Banks in India, each with two separate Departments, viz., General Banking Department for doing ordinary commercial banking and Credit Foncier Department for land, industrial and building mortgage banking business. Many will agree with author that there is a great need for establishing broad-based mortgage banks in India. But, should these banks be organised on a Provincial basis or an all-India basis? And, again, should these banks combine agricultural finance, land mortgage

banking, industrial mortgage banking and ordinary commercial banking? These are questions on which there is considerable room for difference of opinion. But, in view of the fact that, under present conditions, the credit of a Provincial institution cannot be high, that there is likely to be too much of communal factions in a purely Provincial bank, that economic forces tend to cut across Provincial boundaries, that such Provincial banks will not be able to engage the services of first-rate experts, that the financing of house-building is at present undertaken by certain joint-stock banks and insurance companies, and that we have already got a Central Bank and a number of sound commercial banks, it would seem that the balance of advantage would lie in the establishment of two All-India State Banks, one for co-ordinating, financing and supervising a growing number of land mortgage banks and the other for discharging similar functions in respect of industrial mortgage banking. It also seems improbable that the difficulties that are likely to crop up in the case of Provincial banks can be solved or even mitigated by establishing Regional Banks cutting across Provincial boundaries.

On the whole, the book is an interesting and stimulating one. It supplies much useful information and throws out many valuable suggestions. And throughout the book there runs a note of sincere and passionate desire on the part of the author to get good and big things done without any loss of time. It is a book which should repay a careful study by all those who are interested in the problem of agricultural and industrial finance in this country.

H. L. D.

THE INDIAN MONETARY POLICY, by B. P. Adarkar. Published by Messrs. Kitabistan, Allahabad. 1939. Pp. 112. Price Rs.2/4.

In this book, Professor Adarkar exposes with conspicuous success the absurdities of our currency situation. As a basis for a revision of our policy, we are asked to await stable conditions in a world in which conditions have been notoriously unstable and in which most countries have sought escape from that instability by rapid adjustments of their currency systems. A more bizarre procedure is hard to imagine. The author hits a nail squarely when he insists that the equilibrium of the Government of India's budget is only an element and an insignificant element in the total equilibrium of incomes, agriculture and industry of the whole country. The chapters on the balance of payments and adjustment of prices and costs are incisive, although a more exhaustive discussion and greater emphasis on the ratio of exchange of agricultural and non-agricultural goods might have supplied a more powerful justification of the thesis. His assumption of the possibility of making

gold exports a vehicle of productive investment strikes one as rather facile optimism. Perhaps, the only part of the book which may arouse much dissidence in the ranks of economists is the chapter on Objectives of Monetary Policy, a part, however, which detracts nothing from the presentation of the main practical theme of Professor Adarkar.

The book is very largely a reprint of articles written by the author for the *Indian Finance*. In the vigour and emphasis of its language and in the definitiveness of its argument and conclusions, the book is still true to its journalistic genesis. Since the argument relates to the situation as it existed before the outbreak of the war, it is to be hoped that a second edition will be issued in due course, re-assessing our currency policy in the light of the vastly different conditions of today and examining the bearing of the present thesis on them. Few are better qualified for the task than Professor Adarkar with his incisive, virile and scholarly pen.

S. K. MURANJAN.

SAVINGS IN GREAT BRITAIN (1922-35), by E. A. Radice. Published by Messrs. Oxford University Press, Bombay. 1939. Pp. 146. Price 8s. 6d. net.

The causes of variations in savings are analyzed by Radice in this the second volume of *Oxford Studies in Economics* on the realistic foundation of all types of savings effected in Great Britain from 1922 to 1935. The analysis exhibits a high degree of familiarity with the money and captial markets such as the realistic economist might demand. To this is to be added the experience in accounting methods usually lacking in economists. The most signal feature is the mathematical presentation in regard to which the study may be safely described as a pioneer. One need not, however, go away with the idea that Radice has catered exclusively for the statistician and the mathematician who alone are competent to appreciate the worth of his laborious computations. His work has much to say to the ordinary economic theorists as well. And undoubtedly it has a social message too.

The statistics for working class savings from 1922 to 1934 are derived from the figures for the funds of (1) industrial insurance, (2) industrial and provident societies, and (3) friendly societies and trade unions. Middle and upper class savings are analyzed on the strength of life insurance data.

In certain funds one of the problems consists in ascertaining what proportion belongs to the working classes. One estimate about the wage-earners' shares in various types of savings is as follows:—

1. 2/3rds. Post office and Trustee Savings Bank deposits.
2. 1/3rd. Post Office and Trustee Savings Bank government stock held for depositors.
3. 1/3rd. Building societies' share capital and deposits.
4. 1/3rd. Building societies' borrowers' interest in houses mortgaged.
5. 1/4th. National Savings Certificates.

To the category of institutional savings analyzed in this work belong increases in (1) Post Office and Trustee Savings Banks deposits, (2) National Savings Certificates, (3) Life Insurance, (4) Building societies' shares and deposits and (5) Mortgage repayments. Purely working class savings are excluded from this category.

That economics is fundamentally a science of classes becomes apparent at every stage of the discussion. Somewhat abstruse theoretical propositions have been established by Radice in the perspective of social classes. Of profound economic importance in the world of finance and business organization is the statement that in a community in which business savings are relatively large the proportion of income saved may be comparatively small. Equally significant from the same standpoint is the thesis that the lower income groups may save proportionally more than the higher income groups.

The higher income groups tend to save a rather smaller proportion of any increase in their incomes than the lower income groups. It is suggested that a great part of the savings of the richer classes is made for them by business houses and is therefore not shown as individual income in statistical publication.

During the perod 1922-1934 the real incomes of persons with incomes under 250 increased continuously even during the recent depression, except for a negligibledrop in 1932. Real incomes over 250 show greater sensitivity to cyclical conditions, but their rise since 1932 has been very marked.

The life insurance funds of three of the largest life insurance companies rose from £23 millions in 1922 to £35·2 m. in 1934. The gradual upward trend is ascribed to the increased use of life insurance as a form of saving particularly by the higher income groups.

The distinction between necessaries and semi-luxuries is important. Increased taxation of necessaries is likely to depress savings less than increased taxation of semi-luxuries. The demand for semi-luxuries comes generally from the relatively prosperous wage-earners. The poorest classes among them constitute the market for the necessaries, and their savings are less elastic to changes in income than those of the other section.

Radice suggests two methods for the investment of savings. The first is the investment by the government, local authorities or public boards in a rationalized and planned manner. The second method consists in an appropriate redistribution of incomes. In the first place, the income of the unemployed and the very poorest wage-earners may be increased. And in the second place, the richer classes may be induced to save less in case they are guaranteed better security in sickness, employment and old age. One can see in these prescriptions a somewhat distant echo of the socialistic public finance of the sovietic brand, much in advance of Pigou's modest transfers of wealth.

Be this as it may, the methodology of this work ought to be assimilated by economists in general in order to improve their scientific equipment.

BENOY SARKAR.

HISTORY AND PROBLEMS OF INDIAN CURRENCY, 1835—1939—by D. K. Malhotra. Published by The Minerva Book-shop, Lahore, 1939, pp. 153. Price Rs.2-8.

Mr. Malhotra has given in this book a clear and connected account of the currency development in India since 1835. From the introduction of the silver standard to the eve of the declaration of war Indian currency has passed through many phases and each phase was, as is well known, marked by significant features of its own. The author explains them in terms of the conditions and forces which brought them to the fore and shaped the course of events. The book is intended for the use of B.A. Pass and Honours students and general readers. The latter will find it useful but are not likely to be interested in the subject, but the B.A. students will find in the book a coherant account of the history and present position of Indian currency in broad outlines.

The war will involve far-reaching changes in our currency as in all other spheres of economic life; and these changes will be conditioned by wider changes in India and elsewhere. Whether these changes will be introduced by the general will' of the people in India or have to be passively accepted by them depend upon the relative position of different factors which is at present unpredictable. But in the shape of things to come it is clear that the post-war monetary reconstruction will have to be an organic part of the general reconstruction. The author is in favour of India having 'independent' monetary system of its own. Let us hope that India will have monetary 'independence' and that will mean that Indian currency will be a part of the international currency system and work in unison with it.

Mr. Malhotra has in this book shown a good understanding of the background of the Indian currency problems and has equipped himself for dealing with the difficult problem of re-construction. That would logically be the next step in his Indian currency studies and he should be able to take it with knowledge and self-confidence. The book is good itself and may be taken as a promise of better things to come.

GYAN CHAND.

URBAN AND RURAL HOUSING—Published by League of Nations, Geneva, 1939. Pp. 159.

Mr. A. Loveday, Director of the Financial Section and Economic Intelligence Service of the League of Nations, writes in the Preface to this volume on "Urban and Rural Housing" that in 1937, the Assembly of the League, decided that an "international study" should be made "of the methods employed in various countries for improving housing conditions, with special reference to the cost involved and the results obtained, granted the objects in view."

The Enquiry was entrusted to Mr. M. B. Helger, of the Swedish Social Board. This volume embodies the results of the investigations conducted.

It is stated that before the last Great War, though housing conditions among the lower income categories were a matter of concern to public opinion and public authorities in many countries, it is only since the War, and particularly after the Great Depression that far-reaching changes have come about in the matter of housing policy. Marked changes have taken place in the prevailing conception of the duties of public authorities in housing matters. Mr. Helger remarks: "Thus, vast schemes have been set on foot for slum-clearance, for abatement of overcrowding, for scientific research into housing hygiene and the application of new principles established to public health regulations and town-planning, and the extension of housing policy to rural areas which before the war were more or less neglected".

The Report is a careful and able survey of the problem in all its many-sided aspects. For us in India it should be of special interest.

In regard to housing shortage, it is pointed out that it is mainly due to the changes in age distribution. The proportion of people of marrying age and desiring to set up separate households has steadily tended to increase. In urban areas the problem has been further accentuated by village populations migrating to the cities. The shortage and inadequacy of housing, in rural areas, is itself prominently stressed in the Report. Indeed in certain countries it has

been suggested that it has stimulated migration to foreign lands. To this shortage must also be added the rise in demand for better and more sanitary type of house. Even the poorer sections of the community would desire to get into better houses, rent permitting.

The demand for housing is deemed to be inelastic. The supply of housing is governed by the anticipated rental value of the property, and the ruling rate of interest. The lower the rate of interest, the higher is the value of house property, and *vice versa*. In fact Mr. Helger remarks: "In view of the wide fluctuations in the rates of interest charged on short-term loans, those rates influence property values, building costs and consequently the profits earned by builders of house property to a by no means negligible extent. It would seem, however, that the rates of interest charged on long-term loans, and, more particularly, the real yield from securities, exercise an influence on building activity that is still greater, and indeed frequently decisive."

Various methods have been adopted to furnish financial assistance. There are for instance the private mortgage banks. These have rendered a commendable service in countries like the Netherlands, Belgium and Canada. The *Credit Foncier de France* is a well-known institution in this connection. Then there are the co-operative mortgage societies and various types of building associations. Besides private effort, the Governments of the various countries have taken diverse steps to actively help in meeting the housing shortage. This was utilised by some Governments as a major method in mitigating unemployment itself.

As never before, the problem of Rural Housing has attracted very special attention, since the war. In several countries the problem is distinctly acute. But now, however, due to a variety of causes, the condition of rural dwellings is improving. Technical progress, electrification, improvement in the means of communication, have all contributed to the solution of the question.

In this matter we cannot help pointing out the absence of any policy of the Government in India, to meeting the chronic situation of rural housing. Even the public has not sufficient conception of the seriousness of the matter. Of course, the problem is highly complicated. It will not prove easy of solution. Yet, the Provincial Governments should definitely mark out a policy of rural housing re-construction. A Ten Year programme may be mapped out.

A close examination of the methods adopted in ten important countries of the world, in respect both to the houses of urban and rural populations is given. We regret that no Asiatic or African country has been considered. The gap is obviously too great to

remain unfilled for any length of time. It would be an enquiry well-worth undertaking.

S. K. RUDRA.

PROBABILITY, STATISTICS AND TRUTH—by Richard Von Mises. Published by Messrs. William Hodge & Co., Ltd., London. 1939. Pp. 323. Price 12s 6d. net.

This book contains six chapters in which the Theory of Probability has been fully developed. According to Professor Mises the Theory of Probability exclusively deals with frequencies in long sequences of observations, it starts with certain given frequencies and derives new ones by the application of one or more fundamental operations of Selection, Mixing, Partition and Combination. This theory gives emphatic warning against all predictions concerning the probable result of a single game and shows its usefulness in insurance, where it allows the premiums and reserves to be calculated in a way which makes the business a fair one for the insured and gives a reasonable security to the companies.

Professor Mises has shown the inadequacy of the following classical definition of Probability given by the well-known writer Laplace—

'Probability is the ratio of the number of successful cases to the total number of equally likely cases.'

He has succeeded in establishing the superiority of his definition and has fully met the objections raised against it.

The Classical Laws of the Large Numbers have also been discussed in the light of this new theory. Its application to various practical problems has been clearly demonstrated by numerous examples from Natural and Social Sciences.

The Theory of Probability forms an important part of a course in statistics and generally expressed in mathematical language which very few students can understand. The great merit of this book lies in fact that the theory has been clearly explained with numerous illustrations in language which requires no knowledge of mathematics for its understanding. Therefore the book is found to be very useful to all students of statistics who have little knowledge of higher mathematics. The book will also be useful to the Scientists when they make use of the Theory of Probability.

DAYA SHANKAR DUBEY.

PRINCIPLES OF THE MATHEMATICAL THEORY OF CORRELATION—by A. A. Tschuprow. Published by Messrs. William Hodge & Co., Ltd., London, 1939. Pp. 194. Price 12s 6d. net.

The purpose of this book is to provide a logical forundation for the Theory of Correlation. A successful attempt has been made by the author to link up the Modern Theory of Correlation organically with the Theory of Probability. The author also presents a logical method for measuring the intensity of association between variables.

In order to have a deeper understanding of the relationship under examination, a mere knowledge of the formulæ for calculating Correlation ratios and Correlation Coefficients is not sufficient. The statistician who employs them must be familiar with the subject of investigation, must have complete command of his material and must have correct knowledge with regard to the Theory of Correlation. The book under review gives that correct knowledge and therefore we recommend it to all those who are interested in the study of the Theory of Correlation.

DAYA SHANKAR DUBEY.

INDIAN AND IMPERIAL PREFERENCE—by Balkrishna Madan, Published by Messrs. Oxford University Press, Bombay. 1939. Pp. 279. Price Rs.7.

There are few problems of Indian Economics on which more controversy has raged or more misconceptions exist than in the realm of India's Foreign Trade and her Commericial Policy. Our fiscal policy has been subjected to criticism from almost all quarters—to the ardent nationalist it has been too much diluted with 'discrimination' and 'preference' to be acceptable, while its haphazard and almost unplanned growth has been the despair of Indian Economists. The need for clear thinking in this matter can hardly be over-emphasized, particularly when we bear in mind the undeniable fact that in a politically dependent country like India any scheme of Imperial Preference or Indo-British Trade Agreement must create a natural (though often unfounded) suspicion that the economic interests of India are being sacrificed to those of the United Kingdom. Dr. Madan has achieved the triumph of writing a book that is remarkable not only for its clarity of thinking and wealth of data but also for its non-partisan and impartial outlook. His book is a product of real research and deals in first-rate fashion with real problems.

It would be hardly an exaggeration to say that the age of *laissez-faire* and free trade are gone for ever and the nature of the economic forces operating over the World's International Trade are such that planning in fiscal policy is essential if we are to avoid the

adverse consequences of unco-ordinated international tariff policy. In the early days of industrialism International Trade no doubt promoted division of labour in the fullest sense of the term and gave to the world the maximum opportunity of raising the standard of life in almost every country. But today conditions are very different. The greater vulnerability of large scale industrialised units has made it quite clear that unless they can operate at or near the output for which they are designed and can find markets at prices that cover their costs, an exceedingly painful process of reconstruction has to be undergone. Naturally, therefore, there is an insistent demand for a guaranteed market and schemes of Imperial Preference or Trade Agreements are promoted as means of providing some security in the uncertain 'export trade'. This trend in the direction of closed or self-contained economic systems has been further stimulated by currency troubles and the mad race for exchange depreciation. Dr. Madan's book will provide to those who are interested in the study of the Commercial Policy of India a carefully chosen mass of material, systematically arranged, and weighed with the unerring judgment of a critical scholar, and will ensure to the general reader a reliable guide for understanding a complicated subject.

In Chapters II and III he gives us a masterly survey of the significant trends of world and British Empire trade which provides, to quote his own words, "the setting for a somewhat detailed examination of the trade of a primarily agricultural, raw meterial exporting country like India" (page 16). Chapters IV to VI analyse the reactions on the Indian Export trade of Preferences. Those who are unacquainted with the complicated and widely varying character and composition of India's export trade will find Chapter V rather heavy reading, but once we have waded through the forest and examined critically the individual trees, we are presented with a stimulating discussion of how our export trade was affected by the Ottawa Agreement. Dr. Madan's conclusions in this respect are stated on page 103 in the form of two broad tendencies. (i) "The tendency to a relatively greater expansion since 1932-3 of non-preferred than of perferred exports appears *both* in the case of the United Kingdom and other countries"; and (ii) "The tendency to a relatively greater increase of exports to the united kingdom than to other countries is apparent *both* in the case of preferred and of non-preferred articles." It is apparent that the second tendency is hardly a matter of surprise—being natural to the very scheme of preference adopted,—but the first one makes the reader sit up and wonder as to whether some more fundamental economic forces have been at work counteracting the scheme of the Ottawa Agreement. But unfortunately Dr. Madan ignores this vital question and dismisses it with the rather vague statement that "The explanation is to be found mainly in the difference in the character

of their commodity composition," (Page 104). But in spite of this regrettable gap, the general discussion of the net effects of the Ottawa Agreement on Indian export trade is refreshingly stimulating, though probably its extreme opponents will not be pleased to find that they were hurling more blame than was its due in view of Dr. Madan's rightly delivered judgment that "No spectacular gains in export trade were expected to follow from its conclusion at a time of general economic dislocation, decline in trade and restrictive national policies." (Page 115) In Chapter VII the effects of Preferences on Import Trade are examined and an attempt is made to estimate the burden on the Consumer and the "Cost" of such preferences on imports. After pointing out that ". . . alarming estimates of the loss of revenue or 'burden on the consumer' are based on error and do not stand scrutiny," (page 134) Dr. Madan goes on to emphasize the folly of the commonplace desire to rigidly weigh on balance the benefits with the cost, for, as he rightly points out, "In any attempt to square the benefits and burdens involved, a comparatively small quantity of the former would correspond to a relatively much larger quantity of the latter." (Page 135) While one could hardly disagree with any of the fundamental conclusions of Dr. Madan in these chapters, yet one has a feeling that in his discussion of the effects of the Ottawa Agreement, Dr. Madan has ignored two rather vital questions, *viz.*, (i) the part played by the depreciation of sterling when it went off the gold standard on September 21, 1931, and (ii) the effect of gold export from India on the nature and extent of our import trade. In any analysis of the part played by the Ottawa Agreement once ought to emphasize the fact that the linking of the Rupee to sterling in 1931 was itself an indirect form of preference to countries that had linked their currencies to sterling as compared to those that still adhered to gold.

Chapter X on "The future outlook" will be of special interest to those who are anxious to know the general lines on which our fiscal policy ought to be based. The very first principle that Dr. Madan clearly brings to light is the need for co-ordination of Commercial and Industrial Policy. At a time when economic self-sufficiency has become the fashion and catchword of the day, and rapid industrialisation is considered the only ideal for India, there is a danger that in our zeal for progress we may often forget the old maxim 'slow and steady wins the race.' Thus, those who think that in "Protection" alone lies the solution of India's economic evils would do well to ponder over Dr. Madan's caution that "... whatever the merits of such international planning, it is necessary to observe that the planned development of external economic relations must accompany, if not follow, internal economic planning." (Page 187). Again, with transparent frankness, Dr. Madan points out that in matters of trade agreement we cannot hope to have our

bread buttered on both sides and that "India should claim no special favours and grant none. She should seek equality, not preferences and privileges." (Page 209) And finally, to that small group who, in their misguided and narrow nationalism, oppose *any* trade agreement with the United Kingdom, the following warning of Dr. Madan should bring sense . . . ". . . the scrapping of reciprocal preferences between the United Kingdom and India will not automatically restore the *status quo* before Ottawa, . . . India could not probably claim the benefit of preferences which the other Empire Countries had secured only by the grant of reciprocal preferences, without making a more or less equivalent return" (Page 242).

On the whole, Dr. Madan's book will be a very useful addition to the growing literature in India relating to our country's economic problems. The book is throughout based upon detailed statistical evidence, and, though Dr. Madan deals with great clearness such theoretical aspects of the problems as he encounters, he gives the reader the satisfaction of knowing that the author has 'his feet firmly planted upon the solid ground of fact' from where he is not likely to fly into 'the regions of abstract economic theory.'

S. K. Bose.

The Stock Market, Credit and Capital Formation—by Fritz Machlup. Published by Messrs. William Hodge & Co., Ltd., London, 1940. Pp. 416. Price 21s. net.

This book was first published in German in 1931 under the title "Borsenkredit, Industriekredit and Kapitalbildung." Dr. Machlup, the author, is certainly well-known to students of economic theory for his contributions to the theory of capital and money, and the book under review, it can be said at once, is undoubtedly one which deserves the close attention of the students of the subject. The central problem of the book is to examine the working of the stock market and determine how far there is truth in the contention that the stock exchange secures credit of which industry could have made much better use, or, to state the issue more broadly, how far it acts as "a sieve rather than a sponge." The author refuses to assume that theoretically as well as practically free competition assures the optimum distribution of credit between the various competing institutions.

In order to provide a satisfactory answer to this problem. the author first of all distinguishes carefully between the different senses in which the word "capital" is used and analyses the stages through which saving by the individual leads ultimately to the formation of real capital. He demonstrates how the money

capital placed at the disposal of the stock exchange speculators is in all casses either used in the production of real capital or it is still at somebody's free disposal. On the whole, his analysis attempts to show that the stock exchange does *not* absorb capital and that it is wrong therefore to imagine that the capital employed in stock exchange speculation is withdrawn from the legitimate needs of industry. It appears that in the original German edition the author had not considered sufficiently the influence of the time factor on his general analysis. That defect has been made good in the present edition by the inclusion of several new sections. and it has been shown firstly, that an increased flow of money capital on to the stock exchange must lead to the floatation of new issues and thus to the investment of the capital in industry, and. secondly, that even in the case of a time lag between an increase in the supply of money capital and an increase in the demand for the same by way of the supply of new securities, the balance might still be finding its way into industry through the sale of old securities by producers. The various criticisms levelled by unfriendly critics against stock exchange speculation are examined in detail in the course of the argument. There is the question, for example, whether an individual's losses from domestic stock exchange transactions represent a loss to the society to which that individual belongs. Here again it is shown that whatever the gains and losses of the various individuals engaging in speculation. these represent only shifts in the distribution of wealth and of income and do not in themselves represent any loss to society.

The analysis of the role of credit, and the relation between credit and capital formation follows the general lines of the celebrated works of Wicksell, Mises and Hayek, and the conclusion is drawn that the roundabout production process can in the long run be maintained only at that level which is warranted by the permanent and steady flow of money capital supply by voluntary saving. This leads up to a discussion of some of the issues in monetary management, particularly with reference to the trade cycle. So far as the relation between security prices and the trade cycle is concerned. Dr. Machlup comes to the conclusion that the move ments of security prices are a more reliable barometer indicating an inflationary movement than the behaviour of commodity prices He suggests, therefore, that the securities market may well be utilised by monetary authorities as the proper sphere of intervention, in combination, of course. with other mechanisms of control. In general, one might say that the argument as well as the conclusions of the author are in line with those of the writers of what is called the Neo-Austrian School of Economists. That should be sufficient indication of the importance—and if one likes, the limitations—of the book. There will undoubtedly be many who will have important differences with the author, especially those who are more

inclined to favour the Keynesian analysis of capital and credit. It is difficult in the course of a short review either to subject the various arguments advanced to a critical examination or even to summarise them adequately. One may only point out that the net result of the inquiry is on the whole to acquit the securities market very creditably and to exonerate it from all blame so long as there is no inflationary credit made available to the speculators on the stock exchange. It is possible to disagree with the author in that it is not always easy to say what is 'inflationary' credit and what is not. The importance of the book lies, however, as much in the various steps in the detailed analysis of the problem as in its conclusions.

One may well close this brief review by quoting Professor Robbins from his review of the original German edition of this book. "Since receiving this review copy," wrote Professor Robbins, "I have read it twice from end to end and several of the chapters three or four times., but I would hesitate to claim that I have yet grasped the full implications of all that it says, still less that I am in a position fruitfully to debate points about which I may have any lingering hesitations." Sufficient warning surely, for any reviewer or student prone to hasty conclusions regarding this very important work. We should have been thankful if the book had been translated for us in the form in which it was originally written in German. As it is, the author has added some new chapters and redrafted some sections of the book in view of the criticisms of the first edition. This should certainly enhance the value of the edition as it is now presented to us in an English translation.

J. J. ANJARIA.

THE ECONOMIC BASIS OF A DURABLE PEACE—by J. E. Meade. Published by Messrs. George Allen & Unwin, Ltd., London. 1940. Pp. 192. Price 6s. net.

Mr. Meade is an eminent young economist who has made his name by his widely read text-book entitled *An Introduction to Economic Analysis and Policy*. In the present work he examines the economic basis of durable peace. It needs a great courage to write such a subject in these, to say the least, profoundly disturbed and unpeaceful days. The book under review gives a brilliant analysis of the present-day restrictive policies and makes some very useful suggestions to counteract their evil effects.

In order to create a stable foundation for durable peace Mr. Meade assumes the existence of an International Organisation (not necessarily the League of Nations, it may be Federated Union of the previously independent state), to which one willingly entrusted economic questions for decision, such as international monetary relation and international movement of commodity trades of capital

and population. The main thesis of this book is to build a just and efficient economic order by avoiding economic booms and depressions by monetary and financial devices operated by the International Organisation which should have the following powers (1) "The International Authority must have extensive powers over the total supply of money and over total expenditure in order to overcome general trade depression. (2) The individual Member states must renounce any intention of planning their own price levels and costs. (3) Wage rates and other costs must possess a considerable Flexibility with in each Member State. (4) The successful operation of the system will be aided by the absence of hindrances to international trade and migration."

One can hardly deny the usefulness of such an International Organisation and the tremendous amount of benefits which are bound to accrue by the proper functioning of such an organisation. But facing the hard facts as they are and the poor results achieved by the present International Organisation, I mean the League of Nations even in a very restricted field, it is highly improbable, (however one may earnestly wish) that the politicians in the immediate future would be ever prepared to surrender their powers to such an International Organisation. I personally think that many of our economic ills would be cured if the politicians agree to restrict their liberties and agree to put as few restrictions as possible on the free movement of goods, men and capital. The most glorious area in the known annals of economic history was the third quarter of the 19th century, and this glory was mainly achieved by the removal of restrictions on the movement of goods, capital and men.

Mr. Meade devotes a good deal of his space to the discussion of international currency, variable foreign exchanges, international trade, exchange control and clearing agreements. In the field of currency he would prefer an international currency issued preferably by an International Bank, and in order to remove the difficulties of balances of payment he suggests that gold value of various currencies should be revised from time to time in order to keep the balances of international payment in equilibrium. Surely it is a most dangerous device to make too frequent changes in exchange rates to maintain equilibrium in the balances of international payments. If this device is resorted to too often instead of leading to durable peace it would exercise most disturbing influence. Although Mr. Meade in the beginning of his book advocates free trade or the closed approximity to it as an essential condition for a durable peace, in his chapter for international trade he hedges it in such a way that it becomes anything but free trade. In his chapter on population movement he makes a perfectly lucid and clear analysis of the existing situation. He makes some very pertinent remarks about India when he says that "India may perhaps

be taken as an exceptionally clear case of a country in which the population problem is of greatest importance. The population is still increasing at a fairly rapid rate, having risen from 315 millions in 1911 to 353 million in 1931. There is at the same time already considerable over population; and some authority can see evidence of an actual pressure of population upon the available means of the physical subsistance." In a table on page 147 he shows that the net reproduction rate is very high in Asia and South East of Europe and the population problem in these countries is a very serious one. After reaching these most disturbing conclusions he very complacently advises the International Organisation that "Emigration should not be freely permitted from a country in which an existing pressure of population upon the means of subsistence is maintained as a result of excessive and unchecked fertility in that country." One would like to know what such countries are to do in view of their extending population and declining resources. What such people are likely to do is tersely stated in the following Persian couplet—

تنگ آمد بجنگ آمد

Necessity leads to desperation. The truth of this can be evidenced by the aggressive policy of Japan which has been necessitated merely to find more room for her teeming millions. To think of building a durable peace by neglecting the problem of these teeming millions of Asia is nothing short of a folly.

ANWAR IQBAL QURESHI.

THEORY OF THE JUST PRICE—by Rudolf Kaulla. Published by Messrs. George Allen & Unwin, Ltd., London, 1940. Pp. 217. Price 7s. 6d. net.

The book, a translation from the German by Mr. Robert Hogg, is a historical and critical study of the problem of economic value; but, as the title indicates, the entire study revolves round the concept of the Just Price. What is the just price is a question that has been differently answered by different men and at different times. In the past, no less than in the present, the conviction that price charged for a commodity or a service should not be altogether unjust has more or less profoundly affected the economic relations between men. The theories of value or the principles underlying the determination of price have, therefore, always been coloured by the prevailing notions of the just price.

In the modern world the distribution of wealth is effected through the operation of the mechanism of price and therefore the theory of the just price is in reality derived from the wider con-

sideration of the just system of distribution. In the introduction the author accordingly explains the fundamental change that has taken place in the principles underlying the distribution of wealth in a society. The two chapters that follow are devoted to the history of the theory of value associated with the idea of the just price and the question of the dependence of value upon law and the State.

The third and the fourth chapters provide some interesting reading for the theorist. There, the upper and the lower limits to the determination of value are indicated. Some significant points are brought out by the following sentences: "Even the pay granted to the last individual whose services are required by the economic system must at least be sufficient to maintain him, or his services will not be forthcoming". (P.101). "The total income of a profession or calling cannot fall below the level required to maintain the number of persons whose activity in that profession or calling is needed to meet demand" (P. 108). "An employer may obtain a subsidiary income from some work performed outside his regular employment. . ." (P. 114).

It is sought thus to prove that there can be no general principle that can determine (the lower limit to) the price of a service. In the words of the author, "So long as a subsistence income is provided by the undertaking as a whole, the selling price of this or that. . . .may fall and remain below its cost of production." Now, this is correct only in so far as "cost" means average cost and not marginal. The reviewer fails to understand how these considerations in any way affect the validity of the universal principle, namely, that the price of a thing (wages in this question) must equal the marginal as also the average cost (in the position of equilibrium). Wages must equal prime cost plus supplementary costs. The latter constitute the cost of maintaining life and that must be divided between as many occupations as the labourer may have and should even be thrown on the capital that he may possess. The fact that the wages obtained in one occupation may and can be below the level necessary to maintain life, does not, therefore, justify the conclusion that the theory which maintains that wages must equal cost of production of labour has only a limited applicability.

Although there is nothing in the book that one may call original, there is much in it that is treated from a rather unusual point of view.

J. K. MEHTA.

BOOKS RECEIVED

A CULTURAL HISTORY OF INDIA DURING THE BRITISH PERIOD, by A. Yusuf Ali. Published by Messrs. D. B. Taraporevala Sons & Co., Bombay. 1940. Pp. 331. Price Rs. 10. [*To be reviewed*]

MARITIME LABOUR IN INDIA, by Dinkar Desai. Published by Servants of India Society, Bombay. 1940. Pp. 256. Price Rs. 2/4/- net. [*To be reviewed*]

THE INDIAN COTTON TEXTILE INDUSTRY, 1940 ANNUAL, by M. P. Gandhi. Published by Messrs. M. P. Gandhi & Co., Calcutta. 1940. Pp. 54 + xxxix. Price Rs. 3. [*To be reviewed*]

KATHIAWAR PORTS, by Prof. R. D. Tiwari. (Reprinted from the *Journal of the University of Bombay*. July, 1940). 1940. Pp. 153. [*To be reviewed*]

THE MADRAS GENERAL SALES TAX ACT—A STUDY, by B. V. Narayanswamy Naidu. Published by Registrar, Annamalai University, Chidambaram. 1940. Pp. 220. [*To be reviewed*]

INSURANCE FINANCE, by A. N. Agarwala. Published by Messrs. Kitab Mahal, Allahabad. 1939. Pp. 122 + v. Price Rs. 2/8/-. [*To be reviewed*]

RAILWAY RATES POLICY, by R. D. Tiwari. Published by Messrs. New Book Company, Bombay. 1940. Pp. 81. Price Rs.2/8. [*To be reviewed*]

ANNUAL REPORT FOR THE YEAR 1939-40. (Indian Lac Cess Committee). Published by Secretary, Indian Lac Cess Committee, Ranchi. 1940. Pp. 33.

PLACE OF SUBSIDIARY INDUSTRIES IN RURAL ECONOMY, by Nathubhai S. Desai. (The Baroda Economic Association Bulletin No. 4). 1939. Pp. 16.

[This is Bulletin No. 1 of the Baroda Economic Association. Mr. Desai has made a special study of a village in the Baroda State. His conclusion is that "Under present conditions, there are too many people employed for too short a time in extracting too little produce from too large an area." The author disapproves of hand-spinning as a subsidiary occupation, stating that it is not economical in the face of competition of mill-made goods.]

POPULATION PROBLEM OF KATHIAWAR, by A. V. Trivedi. (Reprinted from the *Journal of the University of Bombay*, Vol. VIII. Part I. July, 1939). 1939. Pp. 40.

[This is an able statistical enquiry into the condition of Kathiawar's population. As Kathiawar is a conglomeration of States under different Governments, it was a difficlut task to obtain correct figures. The author has succeeded in tackling it and making the best of a bad job.]

PRACTICAL APPLICATIONS OF RECENT LAC RESEARCH, by H. K. Sen. Published by Indian Lac Research Institute, Ranchi. 1940. Pp. 75. [*To be reviewed*]

SEASONAL VARIATIONS IN THE ECONOMIC ACTIVITIES OF JAPAN, by William Alfred Spurr. (University Studies, Vol. XL. No. 1). Published by University of Nebraska, Lincoln. 1940. Pp. 129. [*To be reviewed*]

MARX' PHILOSOPHISCHE ENTWICKLUNG SEIN VERHALTNIS ZU HEGEL. Published by Verlag Oprecht, Zurich/New York. 1940. Pp. 134. [*To be reviewed*]

DAS EXISTENZMINIMUM IN DEUTSCHLAND, by R. Rosen. Published by Verlag Oprecht, Zurich/New York. 1939. Pp. 90. [*To be reviewed*]

THE HAND-LOOM INDUSTRY IN South India, by K. S. Venkataraman. (Bulletin No. 4 of the Department of Indian Economics). Published by the Registrar, University of Madras. 1940. Pp. 288. Price Rs. 3. [*To be reviewed*]

REPORT ON THE ECONOMIC SURVEY OF KURUNEGALA DISTRICT, Bulletin No. 10. Published by Manager, Government Press. Colombo. 1940. Pp. 88. Price 25 Cents. [*To be reviewed*]

THE FORGOTTEN GOSPEL, by Cephas Guillet, Ph.D., published by the Clermont Press, Dobbs Ferry, N.Y. (U.S.A.). 1940. Pp. 395. Price $ 2·50.

[A Churchman's guide to the present chaos in the World's Political and Economic life. He has no patience for any of the modern *isms* and even Democracy as it functions today. "It is much better", the author says, "to stand for some *isms*, however narrow, than to have no enthusiasm at all: but how much better to seek the truth and stand for something eternal and of universal value." An excellent indictment, but rather question-begging in its panaceas.]

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THE PROBLEM OF VALUATION IN A SOCIALIST STATE

BY

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I

A significant development in recent economics is the attempt on the part of analytical economists to extend the conclusions of the general theory of value and distribution to the problem of economising in a socialist state. Economists have generally been conservative and schemes of socialistic reconstruction have had to encounter various criticisms at their hands in the course of the last hundred years. At one time it was usual to refute the socialist thesis by the simple argument that a system of *laissez-faire* competition was best calculated to ensure the maximum of production and therefore the maximum of economic welfare. Sometimes the Malthusian Law was held up as a strong objection to any socialistic arrangement. It was pointed out, again, that the schemes of distribution suggested by socialists were defective in one way or another and that any attempt at abolishing inequalities of income would mean a curtailment of savings and would also lead to the impoverishment of

society as a result of the weakening of the economic incentive and the consequent fall in production. Further, the refutation of the Marxian thesis of surplus value and exploitation was supposed by implication to be a vindication of the capitalist system. And yet, who can doubt that throughout the latter part of the nineteenth century and in more recent times prejudice against socialism has been wearing down and nations with a highly complex capitalistic organisation have been moving willy nilly in the direction of a greater control of economic activities by the State? The Great Depression shook the faith of the capitalist world in its pet theories, and schemes of central planning became the fashion of the day. Planning, it was thought, was the proper solution of the world's economic difficulties, as it promised to combine the best points in capitalism as well as socialism. Very soon, however, it was realised how such a compromise or reconciliation between capitalism and socialism was impossible, inasmuch as the basic assumptions of the two systems are different. It has now been fairly conclusively shown that central planning and capitalism are antithetic terms so that either we must have a capitalist system based on free enterprise and private profit or we must have a centrally planned economic system. To attempt to combine both is to make the worst of both the worlds. Once again, therefore, the question of weighing between capitalism and socialism reappears as a vital issue.

II

Ever since the publication of the celebrated work on socialism by Professor Mises, a new task has been set to the advocates of socialism. The main argument of Professor Mises is well known. Under socialism, he said, there can be no free market in intermediate products; there can be no free pricing; and, therefore, there can be no rational accounting. Every step, he asserted, which takes us away from capitalism also takes us away from a rational calculation of costs and prices. His main contention was that it would be impossible for a socialist state to maximise production, for it would have no index by means of which to distinguish between

economy and waste. That argument has been restated and re-emphasised by Professors Hayek and Robbins. Socialism, they urge, would mean just groping in the dark; it would fail in practice to find a solution of the problem of evaluating heterogeneous goods and services, and especially the services of the various factors of production.

We know how all this is done under capitalism. The pricing system working under the influence of the separate decisions of private individuals in their capacity as producers and consumers ensures in the long run the equivalence of price to marginal (as well as minimum average) cost. A disparity between the two resulting in profits or losses immediately sets into operation forces which correct this disequilibrium. Thus if prices are everywhere equal to marginal cost, and if there is no divergence between private and social marginal cost, the free competitive system brings about the 'optimum' distribution of productive resources in regard to their several uses. If, in a given line of production, thus runs the argument, price is below the cost of production, it is a signal for the productive factors employed in this line to move to some other line where, by hypothesis, they can satisfy more urgent demands; and so on. "More urgent" in this context refers, of course, to the urgency as defined by the purchasing power of the individuals concerned. In this sense market prices reflect relative urgencies of demand for various goods and thus serve as a guide to producers and consumers desiring to make the most of the situation. The price system thus makes "rational accounting" possible. What things to produce, how much of each to produce, by what combinations of factors to produce each, how to distribute the joint product of factors as between the owners of these factors, all these questions are thus determined automatically and simultaneously by the working of the price system.

Now, a socialist state is by definition a state in which all the non-human instruments of production, land, factories, machines, railways etc., are owned by the State. No one can say that that very fact disposes of the problem of scarcity. The economic problem will therefore remain even under socialism. How is this problem to be solved? If we can

assume that the socialist state is an undiluted dictatorship able to dictate what people shall consume and also able to compel workers to move from one occupation to another as required by the plan, then there can be no doubt that the dictator would succeed in evolving an economic system maximising economic welfare as understood by him. All choices would have to be made by him in terms of his own scales of valuation, on the one hand, and in terms of the technical possibilities offered by the environment, on the other. It may be difficult for him always to assess the latter correctly but we can be fairly certain that he can maximise economic welfare within the knowledge and foresight at his command. But this is unabashed authoritarianism. Put this way, the solution becomes unacceptable even to ardent socialists, for such a system would mean the frank denial of the individual's freedom of choice in consumption and also of free choice of occupation. Recently, therefore, writers like H. D. Dickinson and O. Lange have tried to work out the economics of socialism under the assumption that some of the apparatus of capitalism may well be retained under socialism, and have tried to show that a socialist state might well retain the pricing system and thereby solve the economic problem satisfactorily by allowing the economic subjects to play at competition.

III

Dickinson, in his *Economics of Socialism*, outlines his system briefly as follows:

(1) The first problem would be the estimation of social needs. This does not mean wants as they are felt by consumers today. Needs are what we really require for life, efficiency and enjoyment. Some needs are in the nature of personal idiosyncracies, whereas others are fairly amenable to standardisation which can well be determined by a scientific standard or by collective agreement. For estimating the former Dickinson suggests the retention of the pricing system; the latter may be determined by soliciting consumers' opinions through a representative assembly or through advisory councils and also by inviting the opinion of

experts. "On the one hand, there is the production of goods and services to satisfy the demand expressed by individual purchasers in a market. On the other hand, there is the provision of goods and services free of charge to all members of society, as the result of a decision based on other grounds than market demand, made by some administrative organ of the community as a whole."[1] The difficulty of demarcating exactly between consumption socially estimated and controlled and consumption left to the free choice of the individual as registered on the market still remains but that is taken to be a matter of social policy rather than of strict economic calculation.

(2) The next problem would be as to the allocation of productive resources within the field of consumption socially controlled,—the allocation of resources between different communal uses. The cost of such goods and services will have to be met by a levy on the general resources of the community, and the distribution of outlay as between the different heads of production will be along the lines of public finance today. For the purpose of calculation the cost of labour and other materials will be reckoned on the basis of the prices of these factors in the free market concerned with the provision of goods and services for individual consumption.

(3) The problem of valuation is simple when we come to what may be called the uncontrolled sector of the socialist economy. This is the sector within which goods and services are to be sold at a price to the public, who are free to buy as much or as little of each commodity as they like. The prices of consumers' goods in this sector are to be determined by a process of trial and error to be worked out under conditions of competition between a large number of autonomous trading bodies. There is room for competition as well as for prices in the system for, in Dickinson's view, the pricing process is "independent of any particular organisation of the market." This, we may note, is a position entirely at variance with that of Mises who maintains that the market

[1] *Economics of Socialism*, p. 51. Compare Lange and Taylor, *On the Economic Theory of Socialism*, p. 72.

mechanism and the pricing system are the characteristics *par excellence* of the capitalist system. But to proceed with Dickinson's scheme, he envisages " the process of selling goods decentralised into a large number of autonomous trading bodies between which there will exist a sort of competition."[2] The task of finding the equilibrating price, he says, would be facilitated by the determination of demand functions by a proper use of statistical data. It is of course not enough that prices equate demand and supply; they must also equal the cost of production. On this point, Prof. Pigou's solution of equating price with marginal cost is generally endorsed, and in order to cope with increasing or diminishing cost, it is proposed to set up a Marginal Cost Equalisation Fund " into which would be paid all positive rents arising from increasing cost goods and out of which would be paid subsidies to maintain the production of diminishing cost goods."[3]

This raises the question of "imputation," that is, of pricing the factors of production. How is cost to be calculated in respect of the use of intermediate products and original factors? Dickinson gives the following answer: " In a position of equilibrium the following conditions are fulfilled: all means of production are fully utilised; prices of all goods are equal to cost; if alternative methods of production are possible, that one is chosen which yields the product at least cost; and finally, a production good capable of alternative uses is so distributed between different uses that its marginal net product in each use is equal to the same quantity, namely, to its price."[4] These are the theoretical conditions which define equilibrium. In practice, the planning authority has to determine the charges it will allow for by way of rent, interest, and uncertainty surcharge. Take, for example, the determination of the rate of interest. The amount to be saved has, of course, to be determined arbitrarily by the State. Then, the aggregate demand schedule for capital could be arrived at by inviting the various undertakings to

[2] *Economics of Socialism*, p. 63.

[3] *Op. cit.*, p. 108.

[4] *Ibid.*, p. 73.

submit their plans of capital construction at various rates of interest. The rate which equates the demand for and supply of capital will be the equilibrium accounting rate. The socialist state must similarly arrive at an accounting rent and an accounting uncertainty surcharge.

(4) Then, as regards the various units of business, they are visualised as being financially independent of one another and managed along the same lines as under capitalism. The entrepreneurs are supposed to be free to experiment with new products, with alternative methods of production and with the substitution of one kind of material, machinery or labour for another. It is even admitted that the manager or the entrepreneur must bear the responsibility for losses as well as profits. It is true that his choice will be limited in certain directions but that does not mean that he will have no choice at all. Thus, we are told: "Although the making of profits is not necessarily a sign of success, the making of losses is a sign of failure, although even here losses may be due to circumstances independent of the individual manager's control—such as, changes in fashion or in technical methods."[5] Thus, according to Dickinson, it is not necessary that the entrepreneur should bear the full brunt of the consequence of his decisions.

(5) There remains the major problem of distribution. The most essential point about a socialist system as envisaged here is that, while for accounting purposes the national dividend is considered as consisting of the four traditional shares, wages, rent, interest, and profits (if any), actually the entire national dividend is at the command of the State to be distributed suitably among the members. A certain portion, defined no doubt "arbitrarily," of the national dividend, would be set aside for maintaining capital intact and for new capital construction. What remains after this is to be divided into two portions, one to be devoted to communal consumption, or consumption which is socially determined and the other to be devoted to free or individual consumption governed by the free pricing system. Clearly the marginal productivity theory of distribution has no

[5] *Economics of Socialism*, p. 219.

relevance to the problem of distribution in a socialist state thus considered.[6] It is not proposed that there should be an absolute equality of incomes under socialism. Dickinson considers it possible to allow the actual rate of wages to be determined by methods "not essentially different from those in use at present."[7] This would imply some form of collective bargaining coupled with a system of conciliation and arbitration. Inequalities in wages would be justified in terms of the equality of net advantages. This would raise the problem of the movement of labour from one industry to another or the problem of equating the demand and supply of labour in all lines of industry. A socialist system could rely partly on moral persuasion and non-pecuniary incentives, and partly on pecuniary incentives. This last does not mean that wages would be equal to the marginal productivity of labour; it only means that higher wages may be paid where there is a relative scarcity, and lower wages where there is relative abundance, so that the variations of wages may be in the direction of the variations in marginal productivity. In this manner, according to Dickinson, freedom of occupation may be combined with the general scheme of planning. "The advantages of such a system are, in the first place, its flexibility, and, in the second place, the scope it gives to individual taste and preference."[8] In general, the distributive scheme outlined here involves a combination of the principle of equal division, the principle of division according to need, and, finally, the principle of varying incomes in accordance with the relative scarcities of supply. Since

[6] It is, however, useful for costing purposes as seen above.

[7] The general principles are defined as follows: (1) "a shortage of labour in any particular job affords a *prima facie* case for raising the standard wage; (2) unemployment in any particular job affords a *prima facie* case for lowering the standard wage; (3) the net advantages (wages, hours, holidays, public esteem, etc.) of any occupation should be as near as possible the same as those in any other occupation calling for the same degree of hardship, skill and responsibility; (4) Differences in hardship, skill, and responsibility should correspond to differences in net advantages." *Op. cit.*, p. 127.

[8] *Economics of Socialism*, p. 123.

absolute equality is not postulated, a scheme of allowances in special cases and a scheme of taxation of higher incomes would have to supplement the general scheme.

(6) There are several other points, such as the planning of foreign trade, of money and credit, and of public utilities which must also find a place in the socialist system. It is not proposed to go into this here. We may note specifically the point made by Mises and others regarding the necessity of a rate of interest under socialism. If production were instantaneous, or if capital became a free good, there would be no problem of allocating capital as between different uses. Actually, even under socialism, it would be necessary for the planning authority to take into account the influence of time in production. The function of the rate of interest would be to keep a proper balance between goods of different kinds in the production of some of which more roundabout methods are necessary than in the case of others. The rate of interest would of course have no part to play in regulating the supply of savings in general. The amount to be saved and devoted to capital construction will of course have to be determined 'arbitrarily' by the planning authority in view of what it believes to be the relative urgency of a rise in the standard of life at present as compared with that in future. Even then the problem of distributing capital as between several alternative uses still remains. According to Dickinson, as we have already seen, this problem can be solved by constructing an aggregate demand schedule for capital on the basis of several plans of activity submitted by the different undertakings, and by estimating a rate of interest which equates the total demand and the total supply. Thus, while there is no free market for factors of production except labour, and hence no free pricing of capital goods, there is under socialism an index of alternatives available, fixed for accounting purposes.[9]

Such, in brief, is the outline of a working model of socialism which proposes to make use of some of the methods and machinery of capitalism and which aims at retaining

[9] Cf. Lange and Taylor, *On the Economic Theory of Socialism*, pp. 72—75.

freedom of consumption and of occupation within limits. Such a system, it is claimed, will succeed in attaining " a balance of efforts and satisfactions," through all the branches of economic life, at least as effectively as, and perhaps more effectively than, in an individualist economy. It will also secure " an incomparably greater degree of economic equality," and thirdly, under it, " economic freedom could be achieved in as great a measure as, or even in a greater measure than, under individualism."[10]

IV

Prof. Hayek has, in a recent article,[11] reviewed this scheme of competitive socialism. In general, he remains quite unshaken in his belief that the practical problem of evaluating the various alternatives open would be insoluble under any socialistic scheme. He points out, firstly, that the introduction of competition into a planned socialist system involves the abandonment of the much-talked-of superiority of planning over competition. He argues, secondly, that the procedure proposed is not an answer to the main difficulty raised by Mises and himself. And, thirdly, that the scheme suggested is far from practicable. The position is more or less the same as that taken up by Prof. Robbins when he observes: "The question today is whether an effective market in some shape or form is not possible once private property is abolished. Not whether the market is necessary but whether the market can be retained."[12]

Let us attempt a critical examination of the main points in the competitive socialist system as outlined above.

As regards the task of assessing consumers' needs it is natural that a socialist system cannot depend entirely upon the estimates of the market. The term "consumers' sovereignty" used so often and with such emphasis by economists to indicate what they regard as a very strong point in favour of capitalism is after all a relative term. Even

[10] *Economics of Socialism*, p. 226.

[11] *Economica*, May, 1940.

[12] *Economic Planning and International Order*, p. 206.

under the system of private property and capitalism the choice of the consumer is limited to the commodities actually offered on the market. Further, what we call the scales of valuation of the individual are after all, to a very great extent, the result of imitation, social suggestion and the like. Especially when these scales of valuation are sought to be altered by advertising outlays by interested producers, it is no longer open to us to argue that there is any special merit about the satisfaction of the wants of the consumer as reflected in the demand price he is willing to offer for the commodity in question. And this, of course, apart from the further considerations regarding the unequal distribution of incomes. On the other hand, no planner, no socialist would be willing to deny openly the value of some choice on the part of the consumer. Such a denial would scare away people even from a consideration of the proposed scheme. Let us, however, be quite clear about the implications of a socialist scheme of reconstruction. Does socialism mean merely State ownership of the means of production? If it does, if, in other words, we assume all other things to remain the same, then certainly the problem of reconciling economic freedom in regard to consumption or to production with authority seems formidable. Are we, however, right in assuming other things to remain the same? There can be no doubt that socialism presupposes a new attitude on the part of the members of the community. It involves a different political and social environment and, in general, a different philosophy of life. It seems, therefore, that criticisms of socialist schemes on the assumption that the members of the community will retain more or less the same exclusiveness—or "non-tuism" as Wicksteed would call it—as at present, and will be more or less as egocentric as they are today, are therefore misplaced. From this point of view, it is difficult to see why the advocates of socialism should be over-anxious to accommodate their critics by still accepting as valid the idea of consumers' sovereignty borrowed from the usage of capitalism. There must be a certain unity of outlook and of purpose on the part of the citizens of a socialist state. Given a suitable political organization providing sufficient opportunities for the citizen to bring his

opinions to bear on the framing and conduct of policy, the problem of the reconciliation of freedom and authority need not be difficult of satisfactory solution. The driving force of socialism, let it be remembered, is the promise it makes to the "lowliest and the lost" of the community by way of a certain minimum standard of life. It cannot, therefore, afford to make very much of the personal idiosyncracies of oversatiated and pampered individuals. The proper question is not whether there will be the same degree of consumers' freedom of choice as under the present economic system but whether we could arrive at a reasonable definition of common needs which must first be satisfied, in the catering for which therefore according to the directions of a central planning body there may be no room for a feeling of oppression and frustration on the part of the individual. In this connection, it might perhaps be well for us to examine the scheme which Gandhiji has advocated in this country of planning for the satisfaction of primary needs as far as possible on the basis of more or less self-sufficing regional economic units. The point here is: the increase or decrease in the amounts of consumption goods to be produced need not be determined under socialism in terms of relative scarcities as measured by demand prices. The solution offered by Dickinson and those who think like him makes socialism less capable of effecting social improvement, while it does not *pro tanto* simplify the problem of evaluating production goods.

To come to the central point of the discussion, there is no doubt that socialism, like capitalism, must evolve some scheme of valuation in terms of which to express the relationship between heterogeneous goods and factors of production. There is, therefore, no getting away from money and monetary calculation, although money may have different values for different purposes. It is also true, as Prof. Robbins has pointed out, that "it is safe to say that once the number of commodities involved exceeds a comparatively small number, the operations both of ascertaining the relevant information and manipulating it in a suitable way would be quite impracticable. In a world economy with hundreds of thousands of types of

commodities and hundreds of thousands of ways of producing them, the attainment of one solution, let alone the continuous change of solution which changing conditions would involve, would be completely out of the question."[13] The process of trial and error in order to arrive at equilibrium value is subject to several criticisms pointed out in detail by Dr. Hayek in the article referred to above. There is the difficulty due to dynamic changes, and the time-lag between a change in the economic situation and the necessary change in administrative measures regulating the same. It would obviously be impossible to rule out all changes in economic data except those sanctioned by or initiated through the State. There are difficulties due to the impossibility of standardising certain commodities, especially those produced on individual orders. There is the danger also of bureaucratic red-tape and inefficiency. It appears, on the whole, that the solution offered by Dickinson and Lange that we must manage the price system so as to equate demand and supply and plan the production system so as to equate the price with marginal cost does not carry us very far. The system of 'accounting prices' under socialism cannot possibly have the same significance as market prices under capitalism.

Further, there seems to be no satisfactory way of meeting Dr. Hayek's criticism that the managers of business under socialism can never be entrepreneurs. The belief that the entrepreneurial function can be retained by making the managers to some extent financially responsible is a pure illusion. That function is inconceivable except on the condition that the entrepreneur concerned has complete freedom in regard to the selection of the site of his business, the market he would serve, the methods of production he would adopt, the price at which he would buy the factors of production and also the amounts he would buy from time to time. A socialist system must frankly rule out the entrepreneur; the State alone can be the sole ultimate entrepreneur in that system. This reinforces the point we have made earlier, namely, that a socialistic scheme must presuppose a fundamental change in people's outlook. In the absence of such

[13] *Economic Planning and International Order*, p. 201.

change the system would be bureaucratic. There is no getting away from that hard fact. In this sense, however, the problem is more political than economic.[14]

It is also doubtful whether an uncontrolled private sector of industry can function smoothly alongside the controlled socialised sector. We know the difficulties encountered in even a small-scale attempt to control prices, or wages, or rents under the present economic system. Is the idea that the production of commodities in some sense less essential can be left to private enterprise feasible? The decisions of the planning authority in respect of the socialised sector are bound naturally to react so profoundly on the private sector that there would hardly be any room for genuine private enterprise. For instance, what assumption are the private producers to make regarding the availability of the various factors of production or regarding the purchasing power to be left in the hands of consumers? Could profits be left uncontrolled in this private sector? Are not some of the business units managed privately likely at some stage or the other to compete directly or indirectly with the business units under State control and management? This part of the scheme is also therefore far from practicable.

Prof. Pigou has tried to show how the planning authority can bring about the optimum allocation of resources under certain simple assumptions by the use of what he calls "accounting cost." The accounting wage or rent is to be found by the process of trial and error similar to that suggested by Dickinson. "The accounting wage or rent is correct, if and only if at that wage or rent the aggregate demand of the several industries acting on the rule to minimise average (accounting) costs of production, exactly absorbs, with no surplus and no shortage, the available supply of every sort of labour and instruments."[15] His conclusion is that whereas in principle the problem is

[14] Cf. Lange: "It seems to us, indeed, that the real danger of socialism is that of a bureaucratisation of economic life, and not the impossibility of coping with the problem of allocation of resources." *Op. cit.*, p. 109.

[15] *Socialism versus Capitalism*, p. 114.

soluble, in practice it is "extra-ordinarily difficult." Except in a world of supermen, he says, frequent and grave lapses are certain to occur.

Without going into further details we may mention here that the proposal to utilise differences in wages in order to induce movements towards equilibrium also raises more or less the same difficulties as we have noted above in connection with the fixing of prices.

On the whole, then, it does not appear that competitive socialism combined with price-fixing can really answer the objections raised by Mises, Hayek and others. We know by experience that the introduction of social controls to modify the working of capitalism does not produce very satisfactory results. Is it not more or less obvious then that a slight tinge of capitalism added on to what is fundamentally a centrally planned socialist system would also defeat its very purpose? The view of Mises that the valuation of costs and receipts through the instrumentality of the market is a characteristic *par excellence* of capitalism seems to be quite correct. We must admit that enacting a kind of mock competition within a socialised economic system cannot result in the establishment of an "objective" scale of valuations such as Mises is after.

However, the question may legitimately be raised: how far does this damage the socialist case? And here, one has to part company with Mises, Hayek and Robbins. Our first difficulty is as regards the implied presumption in their writings that we have today in working order a system in which there exists a rational calculation of costs and receipts. The real comparison is not between a perfectly competitive economic system, in which prices are equal to marginal costs everywhere and production is at the optimum level, on the one hand, and the socialist system, on the other; but it is between an imperfectly competitive system propped up by all sorts of interventionist measures on the one hand and a socialist system with all its difficulties on the other. Since competition in the real world is imperfect and since equilibrium under such conditions is generally indeterminate, there is a constant possibility of the actual investment of resources in several lines of business activity

diverging from the optimum. Over a fairly wide range, therefore,—though how wide it is not easy to say,—the price system either fails to maximise satisfactions (or minimise costs), or simply does not function freely. To compare in detail the shortcomings of a socialist scheme in relation to a sort of an idealised version of an economic system with which we are thoroughly familiar must necessarily be somewhat prejudicial to the former.

Secondly, the epithet "arbitrary" applied to any scheme of socialist calculation is liable to misinterpretation. Of course, the scales of valuation in terms of which the planning authority will have to decide as to the allocation of scarce resources as between alternative uses is in a sense "arbitrary." Decisions, such as, the line of demarcation between the individualist economy and the socially controlled economy,—if such a distinction is at all to be made,—the decisions as to the amount to be spent on current consumption and the amount to be saved, the decisions also as to the importance to be attached to certain industries in view of the relation of the socialist country to the rest of the world—all such decisions will have to be "arbitrary" in the sense that they will be determined in terms of the scale of priority with which the planning authority will set itself to work. But to admit this is in no way to condemn the procedure involved. The valuations of individuals which are expressed under a free competitive system on the market so as to give rise to what we call the communal scale of valuation are also arbitrary, for it is not possible to argue on principle that this method is inherently more valid than any other which may be adopted for the estimation of human needs. And especially in regard to the demand for factors of production under conditions of more or less imperfect competition, there would seem to be much less ground for endorsing the 'free' decisions of entrepreneurs. The very fact that the planning authority is in a position to formulate and work the plan should under normal conditions imply that the scale of priorities which it seeks to apply to the various decisions that have to be made has the sanction of the public at large. How does the modern State decide as to the distribution of expenditure between, let us say, the

endowment of more schools, the building of more roads, or the construction of armament works? The answer that the decision is made in terms of the equation of the utility of the marginal dose of expenditure to the disutility of the marginal dose of taxation and equi-marginal utilities, is rather beside the point. For, this involves interpersonal comparisons and a weighing up of satisfactions and dissatisfactions experienced by different sets of people. And yet, modern states are spending more and more on various nation-building activities, and we have also learned to expect the state to play its part in regulating investment as between booms and depressions so as to mitigate the violence of the trade cycle. Of course, it can be said that even so the existence of a free market in which certain services are valued and in which the prices of the factors of production are freely determined makes the task of the government fairly easy. At the same time, however, over a considerable range of business activity the government can influence the prices of commodities and factors of production so that the so-called objectivity of the price index ceases to exist, not only when the state comes out as a borrower or as a purchaser but also when big trusts and corporations dominate the market. Similarly, a socialist state may frankly be committed to a policy of planning production and distribution in a particular manner which may be clearly indicated to the electorate in general terms and about which their approval may be obtained. There is some truth in Mr. Dobb's observation that "the utility theory has considerably biassed the approach of economists to this whole problem, resting on the presumption as it has done, that demand is rooted in ultimate satisfactions, and that the values on a free market interpret these satisfactions in an optimum way."[16]

VI

To sum up and conclude:

(1) Whereas under capitalism the price system connects up, and tends though roughly to bring about an

[16] *Political Economy and Capitalism*, p. 315.

equilibrium between production, consumption and distribution, in a socialist state this equilibrium will have to be consciously arrived at; there would be no automatic balance or adjustment between these branches of economic life.

(2) The competitive solution offered by some socialists does not adequately meet the criticisms of some economists as to the "arbitrariness" of the valuation to be adopted by the planning authority. In fact, a reproduction of competitive conditions under a socialist state seems to be entirely impossible. The basic principles of the two kinds of economies are different and we can neither have a socialistic capitalism nor a capitalistic socialism.

(3) The competitive solution offered by Dickinson and others seems to concede too much to the critics in seeking to admit the validity of consumers' freedom of consumption and choice of occupation in the traditional sense of the terms. Socialism is thus given a narrow interpretation. Actually, it is not merely a mechanical change involving a transfer of ownership of the instruments of production from private individuals to the State but it implise the existence of a collective purpose (to be fostered further by education) aiming at a certain decent general standard of life for one and all within the community. It should not be beyond the wit of man to build up institutions which would teach the individual, in Miss Follett's words, "to will the common will" even in matters economic.

(4) So far as we can see at present, prices under socialism cannot have the same meaning as prices today. Ultimately, a very large number of vital decisions will have to be made in terms of the planning authority's conception of the public good. That, it would appear, is what has been happening in Soviet Russia.

(5) Should this, however depress us unduly? Was there no rational economy before the advent of modern capitalism? Prof. Mises and Prof. Hayek would probably say 'no.' But then the word rational is obviously being used in some special—and probably unwarranted—sense. There must be something wrong about a system of thought which equates rationality with a particular way of organising the economic resources of the community. There seems to be

no escape from a certain amount of authoritarianism in a socialist system. There are obvious dangers in such a system. Possibly, a socialist system will at least in the beginning have to aim at the production of certain most important commodities of a standardised nature, essential for the satisfaction of the primary needs of life. It would also possibly prefer to err on the side of "over-saving" rather than 'under-saving.' This however, only means that "the decision regarding the rate of accumulation reflects how the Central Planning Board, and not the consumers, evaluate the optimum time-shape of the income stream."[17] The objection that this is "arbitrary" valuation which represents a diminution of welfare would imply a condemnation of any collective decision at all.

(6) Moreover, there is so much of indeterminateness in the present economic system that we cannot readily admit that in practice it 'rationally' solves the problems which no doubt theoretically it can. Thus, whatever the merits or demerits of capitalism as against socialism on the whole, the case for socialism is not damaged very much by the objection that in practice it would be unable to solve rationally the problem of economic calculation.

SUMMARY

[Socialistic schemes of reconstruction have been criticised by economists from different points of view at different times, but throughout the latter part of the nineteenth century and during the present century the sphere of social or governmental control has continuously widened. More recently, hopes of combining some kind of planning with competitive enterprise have been frustrated, and the problem of weighing between capitalism and socialism reappears once again as a vital issue.

The argument of Professor Mises that under socialism there would be no rational accounting because of the absence of free pricing, especially in respect of intermediate goods, has been restated and re-emphasised recently by Professor Hayek and Robbins. Under the present system, it is argued, there is an objective index —the price system—in terms of which to distinguish between economy and waste. Under socialism such an index would be

[17] Lange, *op. cit.*, p. 85.

lacking. It could therefore not succeed, runs the argument, in making the most effective use of the community's resources, and all that it could possibly achieve is the maximisation of the satisfactions of the planning authority. To answer the charge, writers like Dickinson and Lange have tried to work out the economics of council and experts' opinions, of free choice in consumtion and also in regard to the selection of one's occupation. They try to show that the socialist state could retain the pricing system and that it could solve the economic problem satisfactorily by allowing the economic subjects to 'play at competition'.

The main features of the proposed scheme are as under: (1) The estimation of social needs partly through the instrumentality of a free market and partly through consumers' advisory councils and experts' opinions, and the consequent distinction between consumption determined by the free choice of individuals and consumption determined and controlled socially; (2) Within the field of consumption socially determined and controlled, the allocation of resources as between different uses to be determined along the lines of public finance today; (3) In the uncontrolled sector of the socialist economy prices to be determined by trial and error under conditions of competition between a large number of autonomous trading bodies; (4) The planning authority to equate price with marginal cost adopting for this purpose an accounting rent, an accounting interest rate, and an accoounting uncertainty surcharge; (5) Business units to be managed independently as if under private enterprise; (6) Distribution of income to be guided by the principle of the equality of net advantages, movements of labour from one line to another being brought about partly by pecuniary incentives, and partly by moral persuasion; . . . . In the main, the idea is to combine a certain amount of free choice on the part of the individual with the general scheme of planning. There would, of course, remain certain important decisions, such as the allocation of resources between the field of communal consumption and the field of private consumption, and the decision as to the amount to be saved and devoted to capital expansion. These would be 'arbitrary'.

In a recent article Professor Hayek has pointed out that such a scheme involves the abandonment of the original claim as to the superiority of planning over competition, and that it does not still solve the problem of rational valuation of alternatives available. It is necessary therefore to see precisely the meaning of consumers' choice and also of what has been called rational accounting, in order to be able to judge the issue.

We would stress in this connection first of all the relativity of the idea of free consumers' choice, often expressed as consumers' sovereignty. We must consider the practical limitations on such choice, as also the wastefulness of the same in certain spheres.

Socialism presupposes a changed outlook. To insist on free choice under socialism in the same sense as under capitalism is to narrow unduly the scope of reconstruction. In essence this is the old problem of reconciling law and liberty or public good and private good. It cannot be presumed, as some critics of socialism seem to do, that any attempt to estimate social need collectively and through a central body would necessarily be a negation of freedom in the econmic sphere. To think that the only way to ensure freedom of consumption is to allow people to compete for supplies on the market is to take too narrow a view of the possibilities of human organisation.

Secondly, however, the difficulties pointed out by Professor Hayek and others in the way of a determination of prices by trial and error seem to be real. Nor does it seem possible to retain the private entrepreneur in any genuine sense under a socialist system. There are difficulties again on account of dynamic changes, and also on account of possible disharmonies between the private uncontrolled sector and the socially controlled sector. Moreover, there are dangers of bureaucratic red tape and inefficiency.

It seems, then, that just as a bit of planning added on to what is mainly a capitalist system cannot work satisfactorly, so too there could hardly be any advantage to be gained by combining a slight tinge of the capitalist or competitive system to what is mainly a socialist system. To say this, however, is not to endorse the view that socialism is therefore incapable of solving the economic problem rationally.

While it is true that the valuation of costs and receipts through the instrumentality of the market is an institution *par excellence* of the capitalist system, this does not in itself involve a condemnation of any socialist scheme as 'irrational'. The only valid comparison is between an imperfectly competitive system propped up by all sorts of interventionist measures on the one hand and a socialist system with all its difficulties on the other. It is admitted by analytical economists that the problem of the allocation of resources in an economical manner is theoretically soluble under socialism. It is difficult to maintain that more than this can be claimed for the capitalist system as well. In pratice, we know how the present system often fails to achieve in practice what it might be potentially capable of achieving.

The term 'arbitrary' applied to any scheme of socialist valuation is similarly liable to misinterpretation. Such valuation will proceed in terms of the scale of priorities with which the socialist state would be working. The decisions of the planning authority would reflect this basic valuation, which presumably would have the sanction of the approval of the general public. If we call this 'arbitrary', we may as well admit that the valuations

arrived at by a free market are also in one sense 'arbitrary'; for that also represents one mode of estimating the economic importance of resources. Far-reaching decisions in the sphere of public policy are actually being taken at present without the help of the price index, often even in contravention of the indications of that index. An individual does often have to choose between alternative ways of allocating certain scarce resources for which there is no market index available. Could all such decisions be called 'irrational'? If an individual could be guided in such matters by what may be called the basic values of life, so may the State. In this sense the proper functioning of a socialist system does presuppose a certain agreement as to the ends of individual and social action. But to identify 'rationality' with a particular mode of organising economic life (such as the capitalist) seems to be no more than an unwarranted prejudice.

Our main conclusion therefore is that while the attempt (such as that of Dickinson and Lange) to combine socialism with competition and competitive prices would end in failure, this does not imply either that the present system does in fact solve the economic problem in the most desirable manner, or that a socialist system would necessarily be 'irrational'. There would under socialism be no automatic adjustment or balance between production, consumption, and distribution; such equilibrium would have to be arrived at consciously, and the criterion would be settled by the sense of relative importance of things in the social order envisaged, or by what we may call the generally accepted conception of public good.]

RATE STRUCTURE OF PUBLIC UTILITIES IN A SOCIALIST STATE

BY

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Economic Features of a Public Utility

The concept of Public Utility is applied to several industries such as railways, generation of electricity, gas and water works. The services that they render are indispensable for the social welfare of the community. Public Utilities possess certain peculiar economic features which render them and other industries mutually exclusive. The large specialized equipment which they involve, and the utility of duplicating plants and interfering with highways have effectively prevented competition among them. Hence they are treated as natural monopolies.

Circumstances have also favoured public utilities to exercise the power of discrimination in their price structure. Price discrimination among certain industries depends upon three factors, namely, the motive for differentiation, the ability for differentiation and the benefit of differentiation. The motive for differentiation is strong when the proportion of overhead costs to prime costs is high. In such circumstances the aggregate sales are increased through a scheme of differential prices in order to maximise total revenue. The proportion of overhead costs among public utilities is high due to their large specialized equipment, and as such their motive for differentiation is strong. But others like the Iron and Steel Industry, with an equally strong motive, are incapable of exercising discrimination. Hence the true differentia between Public Utilities and other industries consists not merely in the motive but in the ability to discriminate.

The ability to discriminate depends upon the capacity to isolate markets so that competition of similar products from elsewhere is prevented. As Dr. Benham says, the relative non-transferability of the products of a Public Utility protects it from the competition of similar products from other areas.[1] This feature is peculiar to public utilities investing them with the power of discrimination to the fullest extent. Hence public utilities have both the motive and the ability to discriminate. Still the actual exercise of the power rests with the third factor, namely, the benefits of discrimination. This is due to the demand conditions in the different markets. As Mrs. Robinson emphasises, when the demand curves of different markets are "iso-elastic" there is no advantage in a scheme of differential prices.[2] It is only when the elasticities differ that it pays to discriminate between the separate markets and equalize the marginal revenue that is derived from each of them. In the case of the public utilities, the policy of discrimination is always likely to be profitable as the elasticity of demand of their customers is bound to differ.

Thus it is obvious that the economic concept of public utilities is based on the distinguishing feature of discriminating monopoly exercised by them. It is this economic criterion which is decisive in the selection of industries for inclusion in the category of public utilities. However, it should be emphasized that the economic concept has no determinate connotation. Its scope may alter according as the economic circumstances on which it depends undergo a change.[3] As Glaeser says, it is a fixed concept with a changing content.[4]

The Purpose and Forms of Public Control

The monopolistic nature of public utilities has neces-

[1] F. C. Benham, "The Economic Significance of Public Utilities," *Economica*, November, 1931, p. 435.

[2] Joan Robinson, *Economics of Imperfect Competition*, p. 185.

[3] H. E. Batson, "The Economic Concept of a Public Utility," *Economica*, November, 1933, p. 472.

[4] M. G. Glaeser, *Outlines of Public Utility Economics*, p. 179.

sitated the exercise of some form of Public Control over them because, if left to themselves, they tend to yield results which are out of harmony with the competitive hypothesis. They are likely to cause an investment of resources prejudicial to the interests of the national dividend. Very often there may be a divergence between the social and the private net product at the margin.[5] Therefore, as Dr. Benham says, the object of State regulation is to achieve the individualist ideal of producing as much as possible per unit of means employed and of producing that assortment of goods and services which consumers most prefer.[6] The form of public control depends upon local circumstances. Public utilities may either be under private operation with a public control, or under direct public operation. The former method is feasible where private enterprise is forthcoming. With regard to public operation of industries the government bodies are not always the most appropriate organs for the operation of business. This difficulty has, however, been obviated during recent years by the modern device of the Public Corporation which is gaining currency in all the important European countries. It is entirely non-political in character and has to earn a profit like a private commercial concern through its efficiency.[7]

Rate Structure in a Capitalist State

It is obvious from the foregoing analysis that even under Capitalism the normal competitive price policy is inapplicable to public utilities. The basic principle of rate fixation among them is no doubt discrimination, but it arises on account of different circumstances in each case. In the electricity industry there are two circumstances which necessitate a complicated system of rates. In the first place, storage of electricity is not technically feasible and hence it has to be generated according to the demand for it. Secondly, the consumption of electric energy varies from time to time, giving rise to peak and off-peak periods in its demand.

[5] A. C. Pigou, *Economics of Welfare*, p. 347.
[6] F. C. Benham, *op. cit.* p. 435,
[7] Gordon, *The Public Corporation in Great Britian*, p. 3.

Therefore, a large reserve capacity has to be maintained to satisfy the peak load. The only way of economising the excess capacity is through a fuller utilization of the plant. Hence its essential preoccupation is to increase the ratio of the average use to the maximum use. The relationship between the average use and the peak use is known as the "load factor." It is defined as the ratio of the average power to the maximum power during a certain period of time. Therefore, an improvement of the "load factor" means a better utilization of installed capacity. Hence the electricity industry designs a variety of rates according to the purpose for which the energy is used, in order to equalize the use of electricity throughout the day and throughout the year. As Glaeser says "The need of price discrimination is therefore a continuing economic necessity in order to maintain a maximum utilization of existing fixed plant."[8]

Besides, the industry has devised what are known as "two part rates," consisting of an energy charge and a demand charge. The energy charge is for the actual consumption of electric energy by the customer. The demand charge, on the other hand, is for the energy that the company may be called upon to deliver to the full extent of the customer's installation. In other words, it is a contribution from he customer for the "service of availability", rendered by the generating stations. The "two part rates," therefore, reimburse the company for the two types of costs which it incurs, namely, output cost and capacity cost. The latter is due to the maintenance of adequate plant to meet the estimated total demand of the customers at any one time. But an important relieving feature of the electricity industry is that all customers do not demand energy at the same time. In other words, the summation of the individual demands always exceeds the total demand at the central station. This is due to the "diversity factor," which is defined as the ratio of the sum of individual demands to the total demand at the point of supply. Hence the customers need not be charged to the full extent of their demand. The actual demand

[8] M. G. Glaeser, *op. cit.*, p. 626,

charge will depend upon the "diversity factor" in each place.

Therefore, the underlying principles of electricity rates are to earn adequate revenues and to distribute the burden equitably among the customers. To achieve these, the customers are classified and charged differently. The special costs are to be borne fully by each class and the joint costs are allocated among them on the value of service principle. Such discrimination has no monopolistic motive of earning maximum revenue but is only for utilizing the plant fully.

The principles of rate-making among railway transportation services is similar, in their general aspects, to those in the electricity industry. But there are some essential differences in the underlying reasons. Among railways there are two reasons for the divergence of rates from the cost basis, namely, a very large capital outlay and the high proportion of constant as compared with variable expenditure. An allocation of the fixed costs among the different consignments of traffic is not possible, so that the unit cost of transport is indeterminable. Besides, the operation of decreasing costs until the maximum capacity of the line is reached, provides an incentive to take as much traffic as possible by offering different rates. Thus the same principle of discrimination is applied though with a different objective. Various theories have been developed to explain railway rates, the chief among them being the "overhead cost" theory and the "joint cost" theory. Modern economists adhere to one or the other of the above theories, according to the extent to which they are willing to extend the classical theory of joint costs.

So in practice the value of service principle is substituted for the cost of service principle in adjusting rates. This is known as the method of charging according to "what the traffic will bear." To give effect to this principle, commodities having similar characteristics are grouped together into classes and charged differently. Besides, in respect of distance, the basis of the rate often becomes progressively lower. This is a corollary to the principle of diminishing costs operating on the railways.

Suggested Variations for a Socialist State

Having defined the concept of a Public Utility in a capitalist community we may now look at it from the perspective of a socialist state. The problems of control and operation do not offer much difficulty in a socialist state, because along with all other industries, the public utilities will also be brought under governmental management; and there will be ample justification for it as even under capitalism they are subjected to some form of public control. Neither competitive instability nor a private monopolistic exploitation among them is desirable. Hence under socialization perhaps the first among the industries to be brought under state operation will be the public utilities. Therefore, the real issue, which bristles with difficulties, is the nature of price policy to be pursued in a socialist state. Very few among the socialist writers have discussed the problems of economic calculation and readjustment in the new world order which they prescribe. They have not gone beyond extolling the virtues of a socialist Utopia. However among recent writers, Mr. Dickinson[9] has suggested a few variations of the rate structure of Public Utilities for adoption in a socialist state. The cogency of those suggestions may be examined.

At the outset, Mr. Dickinson raises the issue whether discrimination in rates should be retained under socialist administration. He approaches the problem from the standpoint of cost of service *versus* value of service principle in rate-making and ultimately decides that the proper basis of charging for a Public Utility in a socialist community is cost. The cost of service principle naturally raises the issue of average *versus* marginal cost. Mr. Dickinson prefers the former and suggests a new form of average called "mean costs," which is the average cost of services belonging to a particular category. These categories include services which are produced under similar but not identical circumstances. One kilowatt-hour of energy is similar to any other if generated at the same time and by

[9] H. D. Dickinson. *Economics of Socialism.*

the same plant. Hence when the cost of a particular unit of service cannot be separately ascertained the basis will be the mean cost of a category. Any deviation from this principle through price discrimination is considered unscientific because an uneconomic diversion of resources may occur from those industries where discriminating charges are not possible. Hence even though, according to Prof. Pigou and Mrs. Robinson, the ideal social output under certain circumstances may increase through discrimination in prices still it is not considered by Mr. Dickinson to be in the interest of the socialist community.

However, it must be emphasised that the principle of differentiation of charges is not altogether omitted in the scheme of rates recommended for a socialist state. Both in respect of the electricity industry and transport services it is allowed to remain though for a different purpose. In the electricity industry differential charges are recommended if they are likely to lead to an improvement in the load factor resulting in a more uniform distribution of demand throughout time. Besides, charges may also vary between localities according to the size and efficiency of the local generating plant. In other words, the charges may differ according to the variations in mean cost. These differences are likely to disappear with the introduction of a "national grid."

Among railways the capitalist system of class rates and exceptional rates are considered unjustifiable and the system of charging what the traffic will bear is condemned as inequitable. If the traffic is unable to bear the charge it has no claim to exist in a socialist state. Therefore, a uniform ton-mile rate over a given route is considered to be the only just method of charging under socialist administration. Discrimination in charges may however continue, if they are based on differences in cost, due to difference of care required in handling goods, the denseness of traffic, the ease of loading etc. Thus it is obvious that the socialist innovation in the rate structure of public utilities seems to be the substitution of cost of service principle for the value of service principle which is the criterion in a capitalist community.

Economic Calculation in a Socialist State

The feasibility of the socialist innovations in the rate structure of public utilities depends upon the fundamental issue of economic calculation in the new world order. It has been pointed out by some of the critics of Socialism, like Mises and Hayek, that the basic necessity of rational behaviour in any community is a system of economic calculation. Unfortunately, a socialist state is without a guide in this respect. In a society, where the private ownership of the means of production is denied, there are no scales of values available. Both as consumer and producer, the individual in a capitalist state establishes the valuation of goods. In the absence of it, therefore, rational economic action is not possible even normally in a Socialist State. As Mises says, "Without calculation, economic activity is impossible. Since under socialism economic calculation is impossible, under socialism there can be no economic activity in our sense of the word."[10]

This difficulty is further enhanced so far as public utilities are concerned. They defy cost calculation even in a capitalist state, where scales of economic values are easily available. As already observed, the unit cost of railway transport services is indeterminate because it is a function of the volume of traffic, as the principle of diminishing costs is operating on the railways. There are, therefore, two objections against the acceptance of the socialist formula. In the first place, a scientific calculation of cost is not within the realm of the socialist administration. Secondly, even if this primary difficulty is obviated through some statistical device, still Public Utility services will not be easily amenable to cost calculation. It is therefore inconceivable how cost could be the basis of public utility rates in a socialist community. The device of the "mean costs", enunciated by Mr. Dickinson, does not appear to be a very satisfactory solution of the existing difficulties. In choosing separate categories only the sphere of calculation is narrowed. Within those categories the Public Utilities are sure to manifest all their inherent features (defying a

[10] Ludwig Von Mises, *Socialism*, p. 119.

strict calculation of cost. Besides, it is surprising to note that the principle of discrimination in prices which is vehemently objected to at the outset is ultimately retained though ostensibly for a different purpose. Discrimination in the electricity industry is considered permissible when an improvement in the "load factor" is expected. This is certainly the primary consideration even in a Capitalist State and as such there does not seem to be any substantial change in the Socialist variation.

With regard to railway rates it is recognized that a system of rates based on average cost will preclude all traffic of a low value from utilizing the transport services; but it is categorically asserted that such traffic has no right to exist in a socialist state. On the other hand, one has reason to think, that the inclusion of such traffic is nearer the socialist ideal than the capitalist ideal from an ethical standpoint. However even from an economic standpoint there is much to commend a policy of discrimination, because by subsidizing the weaker consumers out of the surplus available from the stronger the total demand is enhanced and consequently the aggregate output of transport services will be greater than what is feasible under competitive conditions. In other words, among public utilities there is a greater likelihood of the ideal output being reached through discrimination than under competitive conditions. Besides, it should not be construed that the existence of the weaker consumers is necessarily at the expense of the stronger. The weaker consumers also contribute something towards the overhead costs, though not to the full extent. Hence an exclusion of the weaker consumers will enhance the burden of the overhead costs for the stronger and will also prevent the operation of diminishing costs. In other words, the average costs are bound to rise. This fundamental consideration is overlooked in the socialist alternative. It is therefore evident, that the adoption of the cost basis in a socialist state, is not likely to yield satisfactory results in price fixation. If at all price fixation in a socialist state is feasible, it could only be based on the value of service principle. Hence the capitalist method will continue to exercise its influence even under

socialism. Any avoidance of it will lead to serious repercussions.

Conclusion

The foregoing discussion has brought into clear relief some of the practical difficulties of valuation in a socialist state which the protagonists of socialism have to solve. The alternatives that have been suggested in the rate structure of Public Utilities are found to be ineffective and unsatisfactory. This is because the socialists have failed to recognize the essential significance of a policy of discrimination among them. Monopolization and discrimination among public utilities are not exercised with a view to earn maximum net revenue but they are a continuing economic necessity due to the technique of operation and the nature of demand. These economic characteristics are not likely to undergo any change with socialization, because they are the inherent features of public utilities and not the outcome of a capitalist order. State control or operation is a feature of public utilities irrespective of the form of economic organization. They are a class by themselves and the price policy that is appropriate to them should be continued even if a change in the economic organization is envisaged. Hence a socialist state has perforce to borrow the capitalist price policy at least in respect of the public utilities. We will not be going far beyond the scope of this paper if we mention, that even in other directions the problems of valuation are not likely to be very successfully solved in a Socialist State. As Prof. Hayek says, "Today we are not intellectually equipped to improve the working of our economic system by 'Planning' or to solve the problem of socialist production in any other way without very considerably impairing productivity."[11]

SUMMARY

[Public Utilities render services that increase the social welfare of the community. They are generally treated as natural monopolies. Discrimination in price structure is an important feature

[11] F. A. Von Hayek, *Collectivist Economic Planning*, p. 241.

of Public Utilities. Generally such discrimination depends upon three factors, namely, the motive, the ability and the benefit of differentiation. The motive is strong when the proportion of overhead costs to prime costs is high. This is true of some other industries as well. Hence the ability to discriminate is important in the case of Public Utilities. Ability to do so consists in isolating markets; and Public Utilities art able to do it, due to the non-transferability of their products. Finally, the benefit of such policy depends upon the demand conditions in the different markets. All the above aspects are favourable in respect of Public Utilities and as such their distinguishing feature is the power of exercising discrimination in their price policy. This monopolistic nature has necessitated some form of public control. Otherwise they will yield results which are out of harmony with the competitive hypothesis. The form of public control depends upon local circumstances. The Public Corporation is the modern device.

Therefore even under Capitalism the competitive price policy is inapplicable and the basic principle is discrimination. But this depends upon the circumstances in each industry. In the electricity industry the storage of electricity is not feasible and there are peak and off-peak periods in its demand. Hence to economise the excess capacity a variety of rates are designed, in order to equalize the use of electricity throughout a given period. Besides, a demand charge and an energy charge are levied to reimburse the two types of costs in the industry. Among Railways the large capital outlay and the high proportion of constant costs renders an allocation of costs difficult. Hence, there is an incentive to take as much traffic as possible by offering different rates. So in practice the value of service principle is substituted for the cost of service principle in adjusting rates among Public Utilities.

Under Socialism the control and operation of Public Utilities will naturally rest with the State. But regarding the price policy certain variations are suggested. Instead of the value of service principle the cost of service is to be maintained by ascertaining the 'Mean Costs' of different categories of services. Thus discrimination in prices has to be given up except under special circumstances such as an improvement in load factor or a variation in 'Mean Costs'. Similarly among railways, uniform ton-mile rates over a given route are recommended and the system of class rates and exceptional rates are condemned.

But the feasibility of the proposals depends upon economic calculation which is not possible even normally in a Socialist State. Regarding Public Utilities the difficulty is further enhanced as they defy cost calculation even in a Capitalist State. Hence the two objections against the acceptance of the Socialist formula are that a scientific calculation of cost is not possible in a Socialist State, and that Public Utility services will not be amenable

to cost calculation. The device of the 'Mean Costs' of certain categories is no real solution, as within those categories Public Utilities will manifest all their inherent features. Regarding railway rates the adoption of the cost basis will exclude all traffic of a low value thus enhancing the average costs per ton-mile. Therefore in conclusion, the Socialist State should borrow the capitalist price policy at least in respect of Public Utilities as their economic characteristics, which are inherent, are not likely to undergo any change with Socialization.]

THE PROBLEM OF VALUE IN A SOCIALIST STATE

BY

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"Every change in social conditions is likely to require a new development of economic doctrines."

Marshall's *Principles of Economics*, p. 90.

A number of economists, under the leadership of Mises, Hayek and Robbins, are making heroic attempts to prove that "in a socialist community, economic calculation would not be possible."[1] It looks as though, under socialism, the sciences of Mathematics, Economics and Technology would disappear! But as the economists seem to be in tragic earnestness about the issue, they could not be implying anything so funny and ridiculous! What do they exactly mean? Comparing the value processes of the capitalist and socialist communities, they find that the capitalist value processes are rational and the socialist, irrational.

When comparing the value processes of socialistic and capitalistic communities, we ought not to forget that the two types of society are qualitatively different. The basic social valuations of the two types of society are so opposed to each other that their respective methods of calculating money values, which are only reflex processes, can as little be compared as hats and shoes. "Whilst the western economist counts as success solely the maximising" not of wealth but "of exchange values in relation to production costs, the soviet planners take account of every purpose of an enlightened community."[2]

When examining the economists' criticism of the value processes of a socialist community, it should not also be

[1] *Socialism* by Ludwig Von Mises, p. 18, Preface to second German Edition.

[2] *Soviet Communism* by S. and B. Webb, Vol. II., p. 678.

forgotten that, in the history of classical economic thought, there is a tradition of opposition to socialism on one ground or another. The peculiarities of human nature, the Malthusian terror of overpopulation, the iron laws of production and distribution, the theory of interpersonal distinctions—all these, one after another, have been put forward as difficulties or obstacles in the way of socialism. Marshall, though he was no socialist, swept away several of these imaginary difficulties and obstacles; and he even went to the length of saying that "every change in social conditions is likely to require a new development of economic doctrines."[3] Yet in discussing the value processes of a socialist community, these followers of Marshall[4] forget the "change in social conditions" and the consequent necessity of "a new development of economic doctrines." In fact, they stubbornly apply the same economic valuation to a different social system. A yard-stick can measure length, but it cannot surely measure volume. This is in fact, what the Neo-Marshallians are doing, under the leadership of Hayek in England and Mises in Europe. But they tell us that they are open to conviction. "Of those, who profess that faith[5] we ask only one thing: persuade us!"[6] But how can you persuade people to believe that the earth is round, when they stubbornly stick to the old superstition, that it is flat! And the people, who apply the geographical valuations of a flat earth to that of a round one, will certainly argue that the geographical valuations based on the roundness of the earth must be irrational; therefore, the people, moving from one end of the earth to the other, believing that the earth is round, will come to disaster by falling over! Similarly, the economists, building up their theories of value, assuming

[3] Marshall's *Principles of Economics,* p. 90.

[4] "We economists—I would add of the school of Alfred Marshall, as there is no one in the field of thought or endeavour whom we would more willingly recognize as our master and leader . . . " Prof. Pierson on "The Problem of Value in the Socialist Society," *Collectivist Economic Planning,* p. 55.

[5] Socialist faith.

[6] *Ibid,* p. 55.

society to be static and completely competitive at that, prophesy disaster under socialism, due to its "irrational" value calculations.

There is another charge against the economists. They will not accept socialism; yet in order to be convinced as to the correctness of socialist valuations, they want a perfect demonstration of the socialist machine, running in perfect order. This is certainly asking for the impossible. "We cannot be persuaded," says Prof. Pierson, "as to the practicability of any system, unless we are first made aware of what it involves and are then given an opportunity of judging whether it would function properly."[7] Now how is this possible? How can the economists be "made aware of what it involves" and be "given an opportunity of judging whether it would function properly," unless it functions at all. Changes in social organization are not like laboratory experiments that they can be observed before they are employed for the purposes of mankind. A socialistic experiment cannot be made in a glass house, in which the economists may not enter, but against which they may well flatten their noses and observe! If the socialists thus argue that the demand of the economists for a perfect demonstration of the adequacy and rationality of socialist value calculations is an extremely unreasonable demand, Prof. Mises and others come down upon the socialists for their "prohibition of thought and inquiry."[8] Nobody has ever prevented or can prevent Mises, Hayek and Company from "thought and inquiry" into the nature of socialist calculation. But since socialism is bound to be the product of a revolutionary situation, it can never be said what type of socialism it will be; and, therefore, to demonstrate disastrous fallacies in the calculations of a particular economic system is extremely unfair. Secondly, the whole of any economic system will never conform to one single pattern. To argue on the basis that it does, is unscientific. Who imagined, for instance, the particular type of agrarian socialism in Soviet Russia? There is all the difference between state farms (Sovkhosi)

[7] *Ibid*, p. 55.

[8] *Socialism* by Ludwig Von Mises, p. 17.

and collective farms (Kolkhosi); and industrial socialism is not only different from agrarian socialism, but there are infinite varieties even in the industrial system of the U.S.S.R. To take a historical analogy, who could have imagined the nature of capitalist society in the feudal period? If the economists of the feudal period had been asked to express their views on the value processes of the capitalist economy, they would have cried out, "Impossible!" Who imagined the enormous, undreamt-of developments in the monetary and banking systems, which, in the last two centuries, have made revolutionary changes in the value processes of modern society? In discussions on the nature of socialist economy, the economists would therefore be well advised not to lose their historical perspective.

In the arguments of the economists, there is another defect also—terminological inexactitude. Considerable confusion is caused by the use of current terminology in discussion on the nature of socialist economy. For instance, demand in a capitalist society simply means the demand by those, who have purchasing power; and this demand or "pull on the market" is in exact proportion to the consumers' purchasing power. Yet when Prof. Mises calls capitalism "a consumers' democracy" and talks of "a consumers' plebiscite" and "continual referendum," he conveys to his readers, in spite of subsequent explanations and corrections, a connotation of demand, which does not correspond to the facts of any capitalist society. In a socialist state, demand is not, except by deliberate arrangements of the planning authority, related to purchasing power, but to the needs of all the consumers. Hence demand in a capitalist society has a different connotation than in a socialist society; and the loose use of the term results into inexcusable illogicalities in the writings of Mises and Pierson.

Another illogicality results from the different meaning of the costs of production; hence the differences with regard to economic efficiency. Let us accept the classical theory that the cost of production comprise wages, interest and profits, since rent does not enter into the cost. We may, for the time being, ignore the Marshallian refinements of the classical theory. Now price must, in the long run, corres-

pond to the costs of production, *i.e.*, the sum of wages, interest and profits. But in a socialist society, interest and profits become the income of the state, as the state is the sole capitalist and enterpriser; and since the state is actually identical with the total mass of consumers, interest and profits cease to be "costs," in the sense that they are in a capitalist society; and therefore, the total price charged need not, except for other reasons, exceed the total wages paid. In the socialist state, the net cost of production is equivalent to the wages paid; but in a capitalist society, the consumers must pay other costs to enterprisers and capitalists. (I do not here raise the issue about the necessity of a rate of interest for a proper allocation of resources; the socialist state may well fix a cost accounting rate of interest[9] for the purpose of allocating resources, but that would not make interest, a cost.)

Prof. Mises does not observe this difference in "costs to society" between capitalism and socialism. In fact, throughout his *Socialism*, the argument runs on the tacit assumption that the mass of consumers is identical with the mass of capitalists and enterprisers, which is in flat contradiction to the facts of the present situation.

Since the views of Prof. Mises on the relative economic efficiency of the two systems are based on the costs of production theory, the illogicality in the premises is carried forward into the conclusion. Apart from his formal defect, there is a "material" defect in the "efficiency" argument of Prof. Mises. Suppose, there are three firms, A, B and C with costs of production, x, $x-y$, $x-y-z$, respectively. If the price is $x-y$, A goes out of the market; B just manages to keep its head above water; and C makes a profit. C is the most efficient, B less efficient and A inefficient, efficiency being measured by the excess of price over costs. So a firm or a combination of firms must keep up the price as high as possible and the costs as low as possible. The price can be kept high by limitation of supplies and the costs low, by low wages. These are the conditions of economic efficiency in the capitalist system. The socialist system simply does not

[9] *Socialism versus Capitalism* by A. C. Pigou, p. 129.

accept these conditions; hence to condemn the socialist system as inefficient is extraordinarily unfair. Socialists regard that system as efficient, in which greater supplies are produced, in case the existing supplies are not sufficient for the *entire* mass of consumers. It is strange, paradoxical and tragic that a system, directed to the satisfaction of the less urgent desires of the rich minority is considered to be more efficient than another, directed to the satisfaction of the more urgent desires of the masses. It is true that the capitalist system is extraordinarily efficient in the performance of its true function—catering mainly for the capitalists. It is also true that the socialist system is not so efficient in the performance of its true function of catering for the masses; because a system, which attempts to satisfy a few, will always be able to do its work very much better than another, which attempts to satisfy all. Nevertheless, the socialistic system is more efficient because the number of people satisfied is incomparably greater and the proportion of more urgent wants satisfied is in the same ratio.

The relative efficiency of the two systems does not, as Prof. Mises argues, depend upon their respective value processes. Since economic efficiency in the capitalist system depends upon net profit to the capitalist-enterpriser, and since the socialists reject the "profit" criterion, we have no common measure of economic efficiency. In fact, the profit to the capitalist-enterpriser, which depends upon the difference between price and his costs, may, from the social standpoint, be a loss. In case, the labourers, under a capitalist-enterpriser, are ill-fed, unhealthy and badly housed; or if scientific research has conclusively proved that the particular product is harmful to the health or morals of the consumers, there is a "social" loss, which is not taken into account. An industry may show profit on its balance sheet; but it may show a loss, if the state expenditure on the improvement of bad labour conditions is debited to its account, as it ought to be. These costs, in a capitalist society, are shifted on to the consumers, as citizens, through the machinery of taxation. Hence economic efficiency is not the true criterion of the success of an industrial system; it is "social" efficiency. But here we are driven to the very

foundations of social organization. I have only tried to prove that the fundamental conditions behind the value processes of a capitalist society are totally different from those of a socialist society; and that the value processes of the capitalist society are a fraud upon the general body of consumers; hence to judge the efficiency of the socialist system on the basis of the value processes of the capitalist society is entirely wrong and unfair.

Now that we have cleared the field of misunderstandings and misconceptions, we may straightaway proceed to quote and criticise Prof. Mises' version of the theory that rational economic calculation is impossible in a socialist state. "Every man, who, in the course of economic activity, chooses between the satisfaction of two needs, only one of which can be satisfied, makes judgments of value."[10] Prof. Mises does concede that these "judgments of value" can be rationally made in any form of social organization, socialistic or capitalistic. "As a rule any one in possession of his senses is able at once to evaluate goods, which are ready for consumption."[11] The difficulty of economic calculation arises with regard to production goods. Even with regard to production goods, the difficulty lies, not in the impossibility of economic calculation, but in the complexity and magnitude of organization; for Mises says: " Under very simple conditions he should also have little difficulty in forming a judgment upon the relative significance to him of the factors of production."[12] The difficulty, according to Mises, is that in a socialist state, a single planning authority has to make all the calculations; while, in a capitalist state, "the distribution of property rights effects a kind of mental division of labour, without which neither economy nor systematic production would be possible."[13]

But as the economic History of Soviet Russia proves, there is nothing incompatible between state ownership of the means of production and "the mental division of labour

[10] *Socialism* by Mises, p. 114.

[11] *Ibid.*

[12] *Ibid.*

[13] *Ibid.*, p. 118.

without which neither economy nor systematic production would be possible."

The real crux of the problem is according to Mises, the continuous chain, which the market establishes, between the valuations of consumers' and producers' goods. This becomes plain, if we consider the three virtues, which Mises ascribes to a free market economy. "In the first place, we are able to take as the basis of calculation the valuation of all *individuals participating in trade*[13a] . . . . . . Secondly, calculations of this sort provide a control upon the appropriate use of the means of production . . . Finally, calculations based upon exchange values enables us to reduce values to a common unit."[14] As regards the first two advantages, respect for "the valuation of all individuals" (*not only those "participating in trade"*) and consumers' "control over the appropriate use of the means of production," these advantages are secured, in Soviet Russia, by elaborate reports, continuously pouring in, into the offices of the Gosplan, from the consumers' cooperative societies.

As regards the third, the necessity of a common unit of value for production goods, Prof. Pigou (*Socialism vs. Capitalism*) has proved that it is quite possible " in principle" and the history of Soviet Russia has shown that it is equally possible "in practice" to evolve a cost-accounting system for evaluating production goods. But would there be a common measure of value between consumption and production goods? It is, of course, obvious, that the money value, ascribed to production goods by a planning authority would mean something very much different from the money value, ascribed to them by a free, competitive market.

How would the planning authority make the necessary calculations for the most economic distribution of resources between alternate ends? In answering this question, Prof. Mises is very illogical, for he makes a confusion, as before, between the value problem and the organization problem; for he says, "No single man, be he the greatest genius ever born, has an intellect capable of deciding the relative im-

[13a] Italics mine.

[14] *Ibid.*, p. 115.

portance of each one of an infinite number of goods of a higher order. No individual could so discriminate between the infinite number of alternative methods of production that he could make direct judgments of their relative value without auxiliary calculations."[15] In a planned economic system, there is no one individual who makes the decision between alternative methods of production.

But Prof. Mises persists in maintaining that "socialism is the renunciation of rational economy;" for "It will have no means of ascertaining whether a given piece of work is really necessary, whether labour and material are not being wasted in completing it. How would it discover, which of the two processes was the more satisfactory? At best, it could compare the quantity of ultimate products. But only rarely could it compare the expenditure incurred in their production."[16] To all this, we can reply: If the products of "the given work" satisfy the consumers, it has proved to be "really necessary." If it does not, then "labour and material" have been wasted, as they often are in a capitalist society, in spite of all its rational calculations. The socialist society is, in this respect, in a very much better position to avoid wastage of labour and materials than a capitalist society; for the whole machinery of production is set in motion in accordance with the ascertained desires of well-organized consumers; in case of changing demand, the whole machinery is under control of the planning authority, so that it can make the necessary changes. "The quantity of ultimate products" is certainly a good criterion to go upon for the allocation of resources; and if this data is supplemented by wage (in Soviet Russia, wages are paid by piece and wherever piece rate is not practicable, by rational efficiency tests) and raw material statistics, a rational allocation of resources can certainly be made between various methods of production of the same commodity, after the preliminary allocation between the various types of production has been made on the basis of consumers' demand and expert advice.

[15] *Ibid.*, p. 117.

[16] *Ibid.*, p. 120.

This preliminary allocation between different types of production, on the basis of regularly ascertained consumers' demands and expert advice, and the subsequent allocation between different methods of production, based on statistics of quantities of ultimate products, wages and raw materials, are certainly rational processes. But Mises does not agree. He has his poser: "Suppose, for instance, that the socialist commonwealth was contemplating a new railway line, would a new railway line be a good thing? If so, which of many possible routes should it cover?"[17] Prof. Mises' contention that a socialist authority could have no rational answer to these questions, is not borne out by facts. "Would a new railway line be a good thing?" Certainly, there are a number of objective considerations, on the basis of which, it could be easily decided, whether a new railway line would be good or no, and which of many possible routes, it should cover. Goods have to be transported from production to consumption centres; and a scientific survey would provide the most rational answer. In my province, the Sukkur Barrage has irrigated large areas of fresh land; grain and cotton have got to be transported to the main consuming centres. Certainly, new railway lines best suited for the purpose, could be constructed without any reference to the pricing system. It could be more easily and rationally done under socialism than under capitalism, because, in a socialistic economy, goods are to be transported, irrespective of the purchasing power of the consumers to places, where they are immediately needed.

In discussing this question, Prof. Mises pays very little regard to facts. Let us, for the time being, accept his theory that "the free pricing of production goods" results in the most rational use of resources. Let us work this theory out with reference to Prof. Mises' own example of the railways. If his theory is correct, then the railways in the capitalist countries must be the most rationally set-up and organized systems. The U.S.A. is the most typical capitalist country; yet all business men and economists are agreed that the railway systems of the U.S.A. are the most irrational systems in

[17] *Ibid.*, p. 121.

the world. Competing lines, running parallel to one another, competing motor traffic, running on roads, parallel to the railway lines, are only a few of the points, necessary to prove the enormous wastage of resources in the transport system of the U.S.A. This wastage is completely eliminated in a planned economic system. The socialist system is bound to be more rational, for "it can use its machinery up to the operating point of the law of diminishing returns . . . the Soviet Union can use its agricultural machinery 100 per cent; the United States only 40 per cent."[18] We may take an illustration, analogous to that of Mises about the railways, to prove, how in the utilisation of resources, the calculations of the socialist authority are more rational than those of the capitalist economy. "In the oil-fields, for example, the spacing of the wells at proper intervals, according to the stratum being followed, is in striking contrast to that of the older wells, which are sometimes close together on either side of a boundary line in order to tap a competitor's flow."[19] These facts disprove Prof. Mises' theory; and as facts are bound to be the ultimate arbiters of theories, the Webbs are bound to succeed against "the deductive economists," who arrive at conclusions, not by observation of facts, but by inferences from pre-conceived theories.

Hitherto, we havs been arguing, as if we accept Prof. Mises' conception of the market as valid. But Mrs. Wootton does not accept this position. " . . . The economist begins by analysis of a completely perfect market, *a kind of Platonic idea of a market* . . ."[20] She is of the opinion that Prof. Mises is living in an entirely "apple-pie" world when he ascribes to the market value processes, maximum efficiency in production and maximum satisfaction in consumption; for " obstinacy, stupidity, necessity and luck" play as large a part in the making of economic decisions as "any reasonably intelligent pursuit of the principle of economy."[21] In

[18] *In Place of Profit* by Harry F. Ward, pp. 64-66.

[19] *Soviet Communism* by S. and B. Webb, Vol. II, p. 648.

[20] *Lament for Economics* by Barbara Wootton, p. 51. Italics mine.

[21] *Ibid.*, p. 60.

fact, the position of the market, even in the capitalist world, is reduced to this: "The Government and the monopolist are fast working themselves into a position in which the market will do what they tell it to do."[22] Even with regard to the completely free, competitive market, Mrs. Wootton takes up a position, which by contrast with that of Mises, looks the funniest in the history of Economic Thought. "Market-pricing . . . is an entirely irrational and arbitrary business." The conclusions,[23] at which she arrives, are not funny, but extremely ridiculous and tragic in their significance. It is a very curious state of affairs in our Economic Science that while Prof. Mises holds that the market valuations are rational and socialist valuations, irrational, Mrs. Wootton holds the market valuations to be irrational and socialist valuations to be rational.

Suppose, we accept Mrs. Wootton's contention. Will not the rational calculations of the planning authority become irrational due to changes in demand and technique? Dr. Gregory[24] is of the opinion that there can be no provision for changes in a planned ecnomic system. Its valuations are related to a certain state of demand and technique; but when the plan begins to operate, there might be changes in demand and technique; so that, when the plan is actually executed, it would be, as it were, that the earth has moved, while the planners have been standing still. In Dr. Gregory's opinion, there are only two alternatives: either there is or is not, a provision for changes. In case, there is no provision for changes, then catastrophe will be the only consequence of the planners valuations. If there is a provision for changes, it is not a plan at all. There is no logic in the argument. All A is either B or non-B. Yes. But all A may not be B or non-B in the same degree. Apart from formal logic, Dr. Gregory's argument does not conform to material facts either in the capitalist or in the socialist system. Big firms, like the Fords or the Imperial Chemical Industries[25] make

[22] *Ibid.*, p. 89.

[23] *Ibid.*, pp. 168-179.

[24] *Gold, Unemployment and Capitalism.*

[25] *Soviet Communism*, p. 642.

huge plans of production and distribution, far ahead of the actual execution of the work. They can make rational calculations and make provision for changes, in spite of formidable odds and enormous incalculable factors, vagaries of the market, of monetary and credit policies—difficulties, which a planning authority has not to face. But a planning authority cannot plan for change! It can and does.. What are the changes that are to be provided for?—"improvements in technique, changes in demand, variations in the volume and composition of the population."[26] The last is easily calculated by the Gosplan in Soviet Russia by the census method, which has been scientifically perfected in all civilized countries. If there are revolutionary changes in the volume and composition of the population, no human society, whether socialist or capitalist, can ever plan for them; but normally the valuations of a central planning authority, in this respect, are more likely to be correct than otherwise. As regards, "the improvements in technique," a planning authority is in a far better position, even Mises and Hayek here agree, than capitalist enterprisers. In a capitalist society, improvements in technique create unemployment[27] and render previously existing machinery unnecessarily useless. The consequent human suffering and social loss—entirely avoidable—are the result of improvements in technique. A socialist authority can slowly (or even rapidly) utilise technical improvements without entailing unemployment or rendering previous machinery useless. There is always some demand calling out to be satisfied or the socialist authority can deliberately create some type of demand to raise the economic and cultural standards of the masses. Technical changes can, therefore, be more easily and rationally incorporated in the planning of a socialist authority than in the plans of capitalist enterprisers.

As regards changes in demand, the procedure adopted by the Soviet authorities is well described by the Webbs: " . . . . a change in popular demand, which leads to a temporary accumulation of 'bad stock' . . . . is met in the

[26] *Gold, Unemployment and Capitalism.*

[27] *Three Sources of Unemployment* by Wladimir Woytinsky.

U.S.S.R., as it is already in every department store in the world, by deliberately planning for selling off such surplus at reduced prices . . . . The plan is promptly adjusted in the course of the year, to the alteration in demand, by slowing down the production in one branch, and increasing to a corresponding extent the production in another branch, of what, under planning, is one and the same community enterprise . . . In the Soviet Union the various scientific institutes, together with other research organizations directly connected with producing trusts of government departments, or with the consumers' cooperative movement, are constantly at work upon discovering what is the most advantageous consumption. Those in authority in the U.S.S.R. are, like the American advertising magnates, very definitely of the opinion that both fashion and taste can be largely influenced by propaganda . . . The whole science and art of commercial advertising depends on its ability to change the customers' demands. On this immense business there is spent annually in the United States and Great Britain several hundred million pounds. Communists are not slow to point out that for this considerable sum the community obtains no assurance that the best commodities are supplanting the worst, or even any increase in the total consumption, but only an increase of the business of certain capitalist undertakings, exactly balanced by the diminution of the business of others. It is claimed that in the U.S.S.R., such influence as can be exerted on popular taste or fashion is deliberately guided by a social purpose, which itself figures in the prognostications of the state planning department."[28]

Even if the calculations of the planning authority can be adjusted to changes in demand and technique, these adjustments may lack that admirable spontaneity and automatism, which characterize market valuations in their reactions to change in the economic situation. But spontaneity and automatism are, by themselves alone, no virtues in a social organization. In fact, an economic organization may run to disaster and depression due to spontaneous and automatic changes in market valuations.

[28] *Soviet Communism* by S. and B. Webb, p. 664,

We heard an analogous argument, when several countries went off gold, nine years ago. We were told that "planned money" like a planned economic system would spell disaster, because it would lack the spontaneity and automatism of the gold standard: The calculations of the monetary authority would not be rational without being based on gold. In fact, the currency authority, like the planning authority without a free, competitive market, would have no basis for making correct valuations. The analogy becomes interesting, when we find that the protagonists of gold are the same economists, who oppose socialism on account of its faulty valuations. Surprisingly, the consequences of planned money (and money is now planned in all countries without exception) are nothing like "The Economic Consequences of Mr. Churchill," who restored the blessed Gold standard in the U. K. in 1925, followed by many silly imitators. There is no reason, why planning of economic activity should be less successful in the correctness of its valuations than the planning of money has undoubtedly been in the post-depression period.

It may now be agreed that the calculations of a socialist authority can be "rational" and the adjustments can be made, if there are changes in the economic situation. But it is said that the planning authority can "keep" its calculations "rational" and make the necessary adjustments, only by a complete regimentation of labour and abolition of the freedom of consumption. We need not, at length, discuss whether there is any genuine freedom of labour or consumption for the mass of the people in a capitalist state. Labour is, of course, formally free; but to say that labour is really free to move from one occupation to another, or from one place to another, is completely at variance with all the facts of the situation. The completely free, competitive market for labour of all kinds does not simply exist. There is so much friction in the movement of labour that the friction is more important than the movement. "There's a crown for who can reach," is true only in the realm of poetic imagination. The mass of men are permanently condemned to occupations, from which they cannot move, as if they had been fixed there by iron bonds. Yet we are told by eco-

nomists that there is a free market for labour; and since labour would not be "free" under socialism, the "free" market, in which, under capitalism, every man finds his proper place, according to his aptitude, and gets the proper wage in accordance with his productivity, would disappear. Labour costs would not be properly evaluated; hence calculations of costs would become irrational. Mismanagement and collapse would be the simple consequence. All this mighty theoretical reasoning is based on no foundation of facts. Labour is not so free in a capitalist state, as the economists imagine, nor is it so unfree in a socialist state, as they seem to think. This is proved by the Webbs with reference to the conditions in the U.S.S.R. "In the U.S.S.R., for every member of the collectivized organization of industry and agriculture, the plan provides a place in which he can earn trade union wages. But although the Five-year Plan provides the necessary total number of situations waiting to be filled neither the plan nor any other law of the U.S.S.R. dictates to Ivan or Nikolai, which of the situations he is to fill. In a much more real sense than in Great Britain or the United States, he may, according to his faculties, make his own choice of work . . . . The Government of the U.S.S.R. has, indeed, no need to employ compulsion to fill its factories or state farms, or even its lumber camps. It finds it quite sufficient . . . . to use the device of making more attractive the particular occupations in which there is, at any time, or in any locality, a shortage of suitable applicants. The obvious remedy is to provide additional opportunities for training in such occupations . . . . An even simpler way is to pay more liberally for the kinds of labour that are temporarily in short supply. Thus, in 1932, in the exceptionally rapid development of electrical installation, there was, nearly everywhere a shortage of coppersmiths. It was accordingly provided that more youths, who voluntarily applied, should be selected for training as coppersmiths, and it was also arranged by the appropriate trade union that the coppersmith should be paid at a higher rate than other smiths."[29] It may be said that

[29] *Ibid.*, pp. 685-687.

this is not socialism, as it means inequality of wages. But there are various types of socialism and there can be no valid argument, unless we stick to Prof. Mises' definition of socialism as simply meaning, state ownership of the means of production. In this definition, equality of wages is neither stated nor implied.

With regard to consumption goods, also, we are told that there would be no freedom of choice. "They would have to take what it was decided to produce. And what it was decided to produce would be the resultant, not of the conflicting pulls of price and costs, but of the conflicting advice of different technical experts and politicians with no objective measure to which to submit the multitudinous alternatives possible."[30] There is, in capitalist society, an "objective measure" of "price and costs," yet is there freedom of consumption? Let the economists answer. "We are free to go into any shop we wish, and to ask for anything that we wish across the counter . . . . Despite this, in normal times, the controllers of industry manage to put the right men into the right places with some 95 per cent of accuracy. But they do it not by giving us what we want, but by making us want what they can give us."[31] This is consumers' freedom; and we are further told by Prof. Robinson that the so-called freedom of the consumer is very costly. "It is as well to remember just occasionally what we pay for our freedom. There are many commodities of which the total distribution costs represent more than 40 per cent of the final price, there are not a few of which they amount to more than half of these costs . . . . a large part is the cost of persuading us to be reasonable in our demands. We might sometimes have both the alternatives, that are open to us for little more than the price we pay for our freedom, we might have, perhaps, both beef and mutton for little more than the cost of the organization necessary to allow us the choice."[32] Let Prof. Mises say, if this is economic efficiency! The freedom of consumption does not exist and

[30] *The Great Depression* by Lionel Robbins, p. 155.

[31] *Structure of Competitive Industry* by Robinson, p. 175.

[32] *Ibid.*

yet we pay a price for a freedom, which exists largely in the imagination of the economist. But what about the consumers' plight under socalism? There is, according to Robbins "no objective measure" since the free market with its "conflicting pulls of price and costs" does not exist. But is there freedom of consumption or no? "As consumers," says Robbins, "they could choose between the commodities available." But this is as true under socialism as under capitalism, with this difference that " . . . . On the choice of commodities to be produced they could have relatively no influence. This is entirely a theoretical proposition, which facts contradict. In Soviet Russia, the demand for commodities is "reported by the network of consumers' cooperative societies to which nearly every adult belongs." Where is the need of an objective measure, when the consumers report their own demands? These decisions " from below " are incorporated in a draft plan, which is criticised by every section of the population for a pretty long time; then is a final plan prepared. When the plan is executed, its results are again criticised by innumerable institutions, Soviets, factory committees, cooperative societies; and the plan for the next year is modified in the light of the consumers' criticism, wherever consumers' control is not possible, practicable or desirable, *e.g.*, the manufacture of turbines, motor lorries, tractors, railways, steamboats, etc., citizens' control is provided, yet since there "no objective measure" of "price and costs" freely determined in a competitive market, there cannot be freedom of consumption! When the Gosplan has before it the reports of the consumers' cooperative societies, where is the need of any other "objective measure"? But Robbins is a great economist. If facts do not fit in with his theory, it is the fault of the facts!

Bur the facts are formidable. Never was theory more divorced from practice than in the intellectual performances of the great economists, who have tried to prove the impossibility of rational calculation in a planned economic system, at the very time, when in the territories of the U.S.S.R., a vast economic structure was being successfully built up for the welfare of millions, who in Czarist times, knew not what life or culture was! We were told that the

gigantic mechanical structures would, due to miscalculations, stand as dead as the pyramids of the Pharaohs of Egypt! They would not move! When they moved, we were told that the movement, again due to miscalculations, would be slow and the product shoddy! But when they began moving fast, gradually improving the quality of their goods, we were told by Dr. Gregory (*Gold, Unemployment and Capitalism*) that it was a boom, which would soon run to disaster. That was in the year 1933. But in 1940, the expected disaster and depression are nowhere in the coming! Now, thanks to all the "irrational calculations" of the Gosplan, the economic and social structure of the U.S.S.R. has, as the amazingly comprehensive researches of the Webbs conclusively prove, blossomed out into "A New Civilization!"

But we may not, though it is extremely unfair, take the Webbs at their word, for they have been avowed socialists for practically their whole life-time. Their attack on "the deductive economists" is fair and logical, supported as it is by a mass of statistical evidence and empirical facts. But it is better to prove the case from the accepted scripture. When Prof. Mises wrote his first German edition of *Socialism* in 1922, and propounded, for the first time in economic thought, the strange thesis that "in a socialist community, economic calculation would not be possible," he had, at least, the excuse of ignorance; for the Bolsheviks had only just seized power. When he wrote the second German edition in 1932, the First Five-Year Plan had still a year to run; moreover, since its deliberate aim and purpose was to develop, to an extraordinary degree, the heavy industries, it was yet to be seen, whether the enormous capital investments would really fructify into equally enormous quantities of consumers' goods. But when, in 1935, under the editorship of Prof. Hayek, he, along with other economists, emphatically repeated the same thesis in "The Collectivist Economic Planning," it was a totally different affair. The First Five-Year Plan had yielded the expected results and the second Five-Year Plan was nearly half complete. Yet

[33] *Socialism* by Mises, p. 130.

Mises tells us that" . . . . he who expects a rational economic system from socialism will be forced to re-examine his views." It will be only fair to ask Prof. Mises "to re-examine his views" in the light of the facts, revealed by that arch-enemy of Soviet Communism, Prof. Boris Brutzkus, whose book "Economic Planning in Soviet Russia" is described as a "Companion Volume" to "Collectivist Economic Planning." Prof. Brutzkus tells us; "*The principal aim of the Five-Year Plan was the development of a great heavy industry, and in general it must be recognized that this aim was achieved.*"[34] If the aim has been achieved, the calculations must have been rational.

With regard to Soviet Russia, another misunderstanding must be cleared. The Economists had prophesied that planning, due to inevitable miscalculations, would result in a scarcity of commodities. When European and American travellers reported scarcity of ordinary commodities, the economists jumped at the facts and discovered that their theories had been completely proved. But the learned professors ought to have remembered that scarcity does not mean the same thing under socialism, what it does under capitalism. In a capitalist country there is in fact no scarcity at any time, because effective demand is always satisfied at the market price. Paradoxically, there might be a famine in a capitalist country, but there would be no scarcity in the economic sense. In a socialist state, there is always scarcity, because the state attempts to satisfy *all* the people. "No scarcity" conditions might, therefore, be far worse than "Scarcity" conditions in a socialist state. The Webbs prove the proposition by facts and figures. "There is, for instance, a constant scarcity of leather boots and shoes. Is this due to any shortage of supply? In 1913 . . . we read, 'Russia manufactured in factories 17 millions pairs of boots, but in 1931 the number had grown to 65·9 million.' Yet leather boots and shoes . . . are, it is said, as difficult to buy as ever! Another household requisite is soap. 'In 1913, Russia manufactured 94,000 tons of soap;

[34] *Economic Planning in Soviet Russia* by Prof. Boris Brutzkus, p. 198. Italics mine.

in 1931 she manufactured 189,000 tons . . . and yet the demand far exceeds the supply.' . . . . Year after year, a much larger quantity per head of population is actually being distributed to the inhabitants, without in any way lessening the apparent scarcity."

Apart from the example of the U.S.S.R., the war experience also furnishes us with a very interesting example of a planned economic system. This enables us to test the thesis of Prof. Mises that it is not possible to avoid disastrous errors in calculation in a society, where all the instruments of production work to the order of the state. Yet this is what precisely happens in war time. It may be said that war and peace do make a difference; what can and should be done in war time, may not be done in peace time. What can be done in war time, can also be done in peace time. What should be done, is another matter. What we are here concerned with, is Prof. Mises' thesis that it cannot be done rationally; and further that if an attempt is made to do it, the result will be disaster due to inevitable miscalculations. Let us test this by the facts of experience. Britain is at war with Germany. The British Parliament (not the supreme congress of the Soviets) has passed the Emergency Powers (Defence) Act, whose operative clause confers upon the King in Council the power "to make such defence regulations making provision for requiring persons to place themselves, their services and their property at the disposal of His Majesty . . . ." On this, the *Economist* (May 25, 1940, p. 924) remarks: " In short, the Government takes control of everybody and everything. It is the *complete conscription of persons, labour and capital.*"[35] What have Prof. Mises, Hayek, Pierson, Robins, Gregory, Brutzkus to say to all this? Are things going to dogs in England due to "the complete conscription of persons, labour and capital?" How has this affected the economic structure? Has it led to a decline in the production of goods the state desires? Has it led to a deterioration in the quality of goods? How does the state bring about the particular allocation of resources, which it desires? How does it fix prices? If

[35] Italics mine.

things do not sell at the fixed prices, what happens? The replies are given, not by the Gosplan, but by the *Economist*: " So far as plant is concerned, the problem is one of bringing into use at once every factory and every piece of machinery that can be used to produce any form of war equipment." This is not the President of the Gosplan speaking, but a British economist! The Ministry of Supply orders production of goods without any regard for the value processes of the market! No price is bargained for, because "the haggling can come afterwards, and the Excess Profits Tax should serve to kill most of the incentive to haggle. If Prof. Mises' thesis is correct, this ought to result in gross economic inefficiency; but the British statesmen assure us that the production system is becoming more and more efficient! The necessary materials are produced with no "rational" regard to the prices in the market, but solely with regard to state needs—exactly what happens under socialism. "Those materials that are produced in this country—chiefly coal and steel, must be forthcoming in whatever quantities are required." So the State treats the market with contempt. But what about its own valuations? How does the Ministry of Labour fix wages? How does the Board of Trade fix prices of consumers' goods? How is changing demand adjusted to fixed prices? All these value processes, Prof. Mises regards, as disastrously erroneous or altogether impossible; yet, in Great Britain, today, they are successfully accomplished, undeterred and undetermined by the market. To quote the *Economist* again: " The Government is taking powers to determine wage rates . . . *Labour must henceforth be found according to a logical plan.*[36] The Government's new powers must be used to take it from where it is and place it, where it is needed." But what about capital goods, because Prof. Mises' theory relates to the valuation of capital goods. What is the experience of Britain at war? There is, in Britain, today "*a rigidly controlled capital market.*"[36] (The *Economist*, Banking Supplement, May 18, 1940, p. 4.) " The authorities had realized . . . that the test . . . would require a more com-

[36] Italics mine.

plete mobilization and more controlled canalization of our capital resources than could be achieved by the incentive of private gain in an individualistic economy. Hence the immediate attack on the freedom of the capital market as the key-position in the attainment of *an effectively controlled economy*[37] . . . the authorities were given a power altogether unprecedented in this country of shaping the character of new capital expenditure and consequently of our productive effort." (Ibid.) As regards the valuation of capital investments, the *Economist* remarks, "It would always be open to Government to make provisions for the valuation of these holdings in the books of the banks. *There are many precedents for such arbitrary valuation of investment holdings in continental banking legislation.*" It is on this arbitrary valuation of investment holdings that the whole theory of Mises about the irrationality of socialist calculations depends. So the war experience, besides the experience of the U.S.S.R., proves the whole thesis of Mises to be entirely wrong and misplaced.

Summing up, we find that in a socialist state, so far as consumers' goods are concerned, *there is and can be a price economy.* Even Mises conceded this position. "It is possible," he says, "to conceive arrangements permitting the use of money for the exchange of consumers' goods."[37] But so far as producers' goods are concerned, there is no market, as they can neither be bought nor sold, since they are and must remain the property of the state. Nevertheless there is *a definite, rational relationship between the consumers' valuations of consumption goods and the making and using of production goods*—a relationship so direct, definite and rational is not to be found in any market economy. But it seems, we have been fighting over mere words. Prof. Mises means something else by "rational" than what we mean. Rational calculation is that which is based on profit. Rational conduct is that which is motivated by profit. *So the real difference between socialism and capitalism lies not in the rationality or irrationality of their respective value calculations, but in the different motives that govern conduct*

[37] *Socialism* by Mises, p. 121.

in each of them. This is well illustrated in a lecture (I am quoting from memory) delivered by Lord Passfield to a group of British boys. "If you buy eggs at 6d. a dozen and sell them at 8d. a dozen, how much would you gain?—2d. a dozen, but *in the U.S.S.R., you would get 2 months' rigorous imprisonment.*" Obviously, the soviet calculations are far worse than irrational! But the irrationality, if any, is not in the economic calculations; it is rooted in the very concept of socialism. What appears to be a difference in the method, character and consequences of value calculations in the two systems is really a difference in their basic approach to human problems.

SUMMARY

[Many economists are of the opinion that the capitalist value calculations are rational, and the socialist, irrational. In this discussion, the economists do not take account of the qualitative difference between the two social systems, which makes illogical any comparison of their value processes. Moreover the economists seems to be prejudiced in this issue. In the History of Economic Thought, there is a tradition of opposition to socialism on one ground or another. Another charge against the economists is their impossible demand for a perfect demonstration of the working of a socialist society before they can be convinced as to the correctness of its economic valuations. In their arguments, there is another defect—terminological inexactitude. Such terms as demand and costs of production must be precisely defined with regard to the type of society under discussion. The economists fail to do this, hence many avoidable fallacies vitiate their arguments; *e.g.*, the relative economic efficiency of the two systems based on the costs of production theory. The socialists do not accept the basic conditions of economic efficiency in the capitalist system. They reject "profit" criterion, hence there is no common measure of economic efficiency.

In Prof. Mises' version of the theory, the difficuty of economic calculation arises, not with regard to consumption goods, but with regard to production goods only. Even here, the difficulty lies, not in the impossibility of economic calculation, but in the complexity and magnitude of organization. To overcome this difficulty, a cost-accounting system is necessary. Prof. Pigou has proved that it is quite possible "in principle" and the history of Soviet Russia has shown that it is equally possible "in practice" to evolve a cost-accounting system for evaluating production goods. Prof. Mises' contention that the socialist allocation of resources is bound

to result in a considerable wastage of materials and labour is wrong; for a planning authority is, in this respect, in a better position than a capitalist society. The preliminary allocation of resources between different types of production is based on regularly ascertained consumers' demand and expert advice; and the subsequent detailed allocation between different methods of production is based on statistics of quantities of ultimate products, wages and raw materials. But we have been arguing, as if we accept Prof. Mises' conception of the market as valid. Mrs. Wootton has proved that it is really "Platonic".

Dr. Gregory is of the opinion that there can be no provision for changes in demand and technique in the value calculations of a planning authority. His argument does not conform to material facts either in the capitalist or in the socialist system. The Webbs have proved by facts and figures that the socialist state can and does provide for such changes. It is further argued that the value calculations of the planning authority can remain correct during the operation of the plan, only if there is a complete regimentation of labour and abolition of the freedom of consumption. The economic history of Soviet Russia provides a complete refutation of this contention. It is surprising that the economists have tried to prove the impossibility of economic calculations in a socialist state in the very face of the enormous achievements of the Gosplan in the U.S.S.R. They argue that there is scarcity of commodities in Russia. They forget that this scarcity is not relative to the "effective demand" of the capitalist society, but to the total demand of all the citizens. Apart from the U.S.S.R. the war experience also furnishes us with a very interesting example of a planned economic system. Britain is at war with Germany. There is "complete conscription of persons, labour and capital", yet the production system is becoming more and more efficient. The value calculations of the planning authority must, therefore, be rational.

The case, which the economists have made out against socialism on the basis of its faulty value calculations, has really no foundation. The real difference between socialism and capitalism lies not in the rationality or irrationality of their respective value calculations but in the different motives that govern conduct in each of them. It is the basic difference in the approach to human problems.]

ECONOMIC VALUATION IN A SOCIALIST STATE

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I. Capitalism versus Socialism

As a rule the main propositions of economic theory apply with undiminished force to a socialist society. Whether the system is individualist or socialist the problems remain fundamentally the same. A change of property-rights, the phenomenon of state investment, changes in class relationships, an altered distribution of wealth—these will not fundamentally alter the character of the economic problem at all. Cassel assures us that new lines of economic policy adopted by socialists tend merely to work out the classical ideal of a system of prices. Wieser declares that the socialist state must retain the same law in force as under individualism or its economy will become chaos. He even identifies natural value with value as it would exist under communist conditions. Henderson speaks of the existence of an economic order more profound and more permanent than the present industrial system, an economic system with laws and relationships that will apply equally to all our social schemes. Pareto asserts in a categorical manner that under socialism commodities will be distributed according to the rules which we have discovered in our study of a regime of competition.[1]

The critics of socialism have, however, held forth that under it economic calculation is impossible. As Mises says, "where there is no free market there is no pricing mechan-

[1] Cassel, *Theory of Social Economy*, Vol. I, p. 76.
Wieser, *Natural Value*, p. 164.
Henderson, *Supply and Demand*, p. 11.
Pareto, quoted by Dobb in *E. J.*, 1933, p. 589.

ism, without a pricing mechanism there is no economic calculation."[2] The critics have got into a state of confusion because they identify the price system with the market. It is only an historical circumstance that we have come to associate price with individual and free exchange in a market. But a price system is really independent of any particular organization of the market, for the essential character of price is just this—a definite numerical relation between units of different kinds of goods which are scarce in quantity. Scarcity is the essence of the pricing process whatever shape the organization of society takes but in a capitalist economy it is made to work within the framework of market, profit-motive and private ownership.

The sole purpose of production is use and hence the common denominator of goods of various kinds and categories is their use. The use-value of goods is best expressed in terms of price. Under capitalism price measures use-value but measures it badly because of monopoly, inequalities of income, immobility of labour and creation of vested interests. Under socialism on the other hand price would be a dependable and accurate index of use-value. There is but one way of estimating the value of heterogeneous and dissimilar goods and that is through their relative prices.

Since scarcity is common to both the socialist society and the capitalist regime we may apply to the one the lessons that we have learnt from the other. It is assumed that in a capitalist regime people themselves decide what shall be provided for them and that the market is the medium through which the consumers express their preferences and that prices reflect the alternative—product costs of the various goods at the margin. The socialist state may dispense with the consumers' choice and all decisions about what people should consume may be made by the Ministry of Production but even in these circumstances a market process and a pricing mechanism will still be necessary for purposes of comparing the marginal productivities of the means of production and of achieving the technical maximis-

[2] L. Von Mises, in *Collectivist Economic Planning*, edited by Von Hayek, p. 111.

ation of the output of commodities in the proportions decided upon.[3]

We have to distinguish between an individual firm and the industry as a whole. The rule for an individual firm or plant is to produce the output on a scale which equalizes marginal cost to the price of the product. But the rule is not fully applicable to the output of the whole industry, because additional plants may be built or old plants may not be scrapped. Hence we have to devise a separate rule for the managers of the whole industry as for example the directors of a National Steel Trust—the rule being that the output of the whole industry ought to be such as to equalise the price of the product to average cost. In practice it means that whenever the price of the product is higher than the average cost the industry ought to be expanded and whenever the price sinks below the average cost the industry ought to be contracted. Whether new plants are to be built or old ones enlarged or old plants ought to be replaced by new plants are all questions to be determined with reference to the difference between price and average cost. Of course the rule is valid only under the assumption of homogeneous production or constant returns to the industry as a whole. If the assumption is dropped we have to recast the rule thus: the output of the industry ought to be such as to equalize marginal cost to the industry as a whole and the price of the product.[4]

Whatever the nature of the economy, goods will be sold at prices which clear the market. Production of particular goods is increased or decreased and the prices in the market fall or rise until they are equal to marginal costs. The principle of marginal costs does not always provide a clear and precise criterion of action. Under conditions of wide-spread competition the term cost of production has a very

[3] Discussions on "Socialist Economy" by Dobb and Lerner in the *Review of Economic Studies*, 1934-1935.

[4] A. P. Lerner "A Note on Socialist Economics" in the *Review of Economic Studies*, 1936-1937.

Hall, *Economic System in a Socialist State*, Ch. VII.

definite meaning but under conditions of socialist production the term cost becomes a matter of calculation.

II. Socialist Money

We have assumed that our socialist community would be adopting a pricing mechanism. Pricing involves the use of money. Socialist money may take two forms, namely book-entry money and current money. Book-entry money is the same as bank deposits transferable by cheques. The bulk of transactions will be paid for by transfers in individual ledger accounts in the savings bank or co-operative society or a central credit institution. In a socialist state each citizen would have his wages or income paid into a savings bank which would settle his account, perhaps at the end of the month, with a co-operative society where most of his purchases have been made. Apart from these payments made by book-entry money there would be innumerable transactions entailing the disbursement of small sums, *e.g.*, postage-stamps, newspapers, cigarettes, bus-rides. Petty cash disbursements cannot be eliminated altogether though the cheque system will go far towards reducing them.

The current money in use for small payments in a collective economy should necessarily be of the token order and not full-weight gold coins. The use of gold coins will amount to a waste of the community's resources which could be better applied elsewhere. Moreover they will become the object of exchange in international trade, thus introducing an element of disturbance in the domestic economy. Money, token or full weight is not an evil in itself as it gives human beings a freedom of choice and self-expression in their spending and an opportunity to maximise their satisfactions that would be inconceivable otherwise, but money should be rendered featureless as far as possible.

The issue of money must be carefully articulated with the amount of real goods produced and consumed. Co-ordination between money and goods is particularly difficult to procure in the sphere of individual consumption. The circulation of money against goods should be regulated with a view to bringing about in a given period an equality

between the sum total of purchasing power in the hands of consumers and the sum total of the prices of all consumption goods. In other words there will be equilibrium when the sum of prices of all the goods equals the earnings of all the factors of production, deductions in each case being made for capital formation and communal use.

A socialist system implies a stable price-level which serves as a basis for economic valuations. In a rigidly controlled collectivist state it is possible to fix prices and output and thus practically eliminate monetary fluctuations. But in a planned economy which envisages a certain amount of freedom, like the one that we are contemplating, there is considerable scope for changes in the general price-level. There may be fluctuations in the unspent margins or changes in the private sector or alteration in the price policy of public enterprises.

The proper aim of monetary policy should be to keep the goods-value of the monetary unit of account constant, that is, the purchasing power of the currency over a standard collection of consumption goods should be maintained at a constant level. An increase of production or a rise in physical productivity should be reflected in an increased money-income to each individual. In a word a sum expressed in terms of currency unit must represent a *constant* volume of real goods.[5]

As in a capitalist economy the causes of changes in the general level of prices may be due either to changes in the prices of the factors of production or changes in the demand for money. It is a common practice under capitalism to try methods of control which act on consumers' effective demand and thus seek to restore the equilibrium in monetary circulation. But it is in consonance with a planned economy to adopt methods which would also regulate the factor prices directly.

The easiest way of controlling factor-prices would be to issue an order for an all-round reduction of these prices or their increase, as the case might be, whenever the index number reveals a marked tendency to move up or down.

[5] H. D. Dickinson, *Economics of Socialism*, p. 193, *et seq.*

The easiest way is also a crude way as it involves an arbitrary interference with the pricing mechanism. A more scientific method would be to regulate the prices of land, labour, capital and risk-bearing services on some index of productivity constructed for each of the factors of production for a particular industry or for a whole community. The regulation could be done by the simple expedient of adding or subtracting percentages to basic rates.

Apart from the control of factor prices it is also necessary to find means of regulating the money demand and liquidity preference of the consumers. In a capitalist economy the consumer's outlay and hence the price-level is sought to be influenced by controlling the volume of investment, that is, by a public works policy. In a socialist economy the volume of investment is the particular concern of the planners and investment policy is governed by more fudamental considerations than the influence of the price level. Under socialism the monetary authority will have resort to expedients such as control of individual savings through banks, increase or decrease in the dividends of the co-operative societies and payments out of the Social Income. In order to regulate the volume of the circulating medium and to check any tendency towards hoarding or dishoarding the central authority might cause a rise or fall in the interest rate offered by the savings banks. A fall in the rate would tend to raise the price level and a rise will have the contrary effect. Similarly the flow of purchasing power could be affected by an appropriate policy of dividend payment by the co-operative stores which would be doing the bulk of the retail trade in a socialist state.

Or again the fund of the Social Income might be used to adjust the flow of purchasing power. The social income is composed of the return to land, to capital, labour and uncertainty-bearing, in other words, rent, interest, wages and profits and of these only wages are paid out, the rest being merely accounting prices and not actual payments made to the landowner, capitalist or entrepreneur. So far as distribution is concerned the social income is a single fund out of which payments could be made to individuals on any desired principle, deductions being made for capital forma-

tion and for the cost of communal consumption. Now the price-level of consumption goods can be raised or lowered by paying out larger or smaller shares out of the social income to the individuals that make up the socialist community.

III. Pricing Process under Socialism

In a capitalist society the economic problem is tackled by the method of production for sale in a market at a price. The question is whether the same pricing mechanism can be made to work in a socialist society. Some socialists are of opinion that the assumptions on which the pricing process is based do not hold good under socialism. Thus they dispute the contention that the individual knows best what is good for him and that the demand schedules of individual consumers are the best indicators of human needs. They have no use for market or price or for the doctrine that wants are insatiable. They believe in a scientific study of human wants and in planning for their satisfaction through standardized production.

Other socialists do not cut away from orthodox economic theory. For them welfare consists in the satisfaction of wants as determined by the conscious choice of individuals. The satisfaction of wants, however, is entrusted not to private enterprise but to a collectivist body so that the organization of production and distribution of income might provide the maximum of individual satisfaction. Socialism to them should be, libertarian and not egalitarian; it should be competitive and not rigidly communistic.

Taking libertarian or competitive socialism as our standpoint we proceed to answer the question which must arise in any economic system: how to dispose of limited resources so as to achieve the maximum satisfaction of human needs. The problem implies some mode of valuation—a scale of achieving the most advantageous use of scarce means among different ends of economic activity, in other words, valuing, costing, substituting and balancing preferences against one another.

In a capitalist society the price system fulfils two functions, *viz.*, the pricing of consumption goods which acts as

an automatic regulator of demand and the pricing of factor goods which acts as an automatic method of distributing the national income. A socialist community might adopt the pricing system for these purposes but it must not put all its faith in the automatic working of the machinery of demand and distribution as against demand it must measure cost in order to make sure that the satisfactions are realized with a minimum expenditure of resources and as against distribution it must not allow marked inequalities of income.

Profit expectations, friction, uncertainty, anarchy, these appear to govern an individualist economy. Competition necessarily implies autonomy of separate decisions which inevitably leads to maladjustment and disequilibrium. Planning means the over-riding of separate decisions: it means that each set of events occurs as a result of decisions taken with proper fore-thought and as part of concerted action. Automatic adjustment and automatic correctives which are supposed to be special features of a competitive market operate through price changes only after the events have actually happened. Under competition the automatic devices do come into operation some time, perhaps some years, after the investments have been made but under planning it is possible for industries to make the correct long-period adjustments.[6]

In a planned economy it is possible to reduce, if not eliminate the divergence between social costs and individual costs or what Pigou has called marginal social net product and marginal individual net product. The wasteful use of land, pollution of the air by smoke, unemployment due to sudden changes in industrial equipment—these social costs may be avoided by knowledge and foresight.

The freedom to purchase consumption goods at a price in the open market results in several advantages. For one thing the consumers can compare the relative attractions of commodities as reflected in their price; and the available supply can be allocated in accordance with consumers' esti-

[6] Dobb, *Political Economy and Capitalism*, Ch. VIII. p. 278.

Durbin, "Economic Calculus in a Planned Economy," *E.J.*, 1936.

mates of their own needs. It has also the advantage that it serves to indicate what goods are most in demand. Even with the best scientific technique it will never be possible to satisfy all needs and thus a choice must be made of what goods are to be produced and a method must be devised for passing them on to consumers who most need them. The choice of goods implies an estimation of the need for a good or service while the problem of allocating goods to consumers can be solved by (1) rationing, (2) eliciting consumers' preferences through an advisory body, or (3) the pricing process in a free market.[7]

Rationing is a crude method of apportioning goods. It does not solve the problem of estimating social need and in actual practice it would be difficult to determine what a single ration should consist of.

Eliciting consumers' preferences will no doubt indicate the quality, variety and convenience of the goods to be produced but the method has the defect of not being quantitative and may lead to the danger that the aggregate costs may absorb more than the total available income.

The pricing process in a market implies the sale of goods at a price. It gives us the best indicator of the quantity of social need and the preferences of individual consumers. The price-and-market method, to serve its purpose in a socialist state, assumes that there are no serious inequalities in individual demanders' incomes. In a society which has acquired more or less equality in distribution a free choice of goods at a price would bring about an allocation of goods in conformity with the needs of the consumers. It is also assumed that society would provide free of cost, what is called communal consumption, its payment being made out of social income and its range and quality determined by the representative body of consumers.

The price formation in a socialist state offers no peculiar difficulty. The state through its selling agencies such as the general shops, retail stores, co-operative societies can sell goods to the consumers and according to their response can regulate the quality and quantity of goods. In the

[7] H. D. Dickinson, *Economics of Socialism*, p. 44.

case of seasonal goods such as strawberries, or perishable goods such as fish, or again, irreproducible goods such as antiques, the supply becomes an independent quantity and the selling agencies will have to adjust their prices so as to just clear their stocks. In the case of the vast majority of goods both price and supply can be varied and the variation will result in the quantity being as great and price as small as possible, provided that the cost is covered. The producing organs will manufacture according to the orders of the selling agencies while the selling agencies will adjust their stocks according as prices are rising or falling. The surplus between cost and price, if any, after deduction of casual losses will revert to the community as a whole or it may even be paid back to consumers as a dividend on pucrhases.

Certain prices, however, should be treated as exceptions to the general rule of price-formation. These prices are not in their nature free; they are fixed in the sense that demand has to adjust itself to the price, *e.g.*, postage rates, railway fares, port dues and court fees. Whether in a capitalist society or socialist state, they are more or less arbitrarily fixed.

For prices in general the device of the demand schedule prepared by the statistical services will be useful. The prime difficulty in drawing up demand schedules in any society is that the demand for one commodity is connected with the demand for others. Especially is this true of related commodities such as composite demand and joint supply. But in a socialist state the statistical services will be better organized. making it easier to frame demand schedules and to adjust prices and quantities with greater accuracy and thus come closer to achieving economic equilibrium.[8]

IV. Calculus of Cost

Production of goods and services involves the using up of various resources. The cost of a given good is measured

[8] G. Cassel, *Theory of Social Economy*, Ch. III and IV.
H. Schultz, *Theory and Measurement of Demand.*

by the quantity of the factors employed in producing that good. The means of production are scarce and they must be utilised so as to produce the maximum satisfaction at the minimum cost. The cost of the output must be balanced against the satisfaction to be derived from it and if there are alternative methods of producing the same good we have to choose the one that involves the least cost.

These considerations lead us to the necessity of discovering methods of measuring cost. Broadly speaking there are three methods, namely labour-cost, energy-cost and price-cost.[9]

The labour-cost method reckons the cost of goods as proportional to the quantity of labour spent directly or indirectly in their production or as Marx would say, socially necessary labour time. But quantity of labour is well nigh impossible to define because labour is not homogeneous and not interchangeable, e.g., typist's labour, doctor's labour, bricklayer's labour or teacher's labour. Marx deemed it possible to count skilled labour as simple labour intensified and to equate a given quantity of skilled labour to a greater quantity of simple labour.[10] The reduction of qualitative differences to quantitative differences may be mathematically possible but it has really no basis in practical life. One would not go as far as Bohm-Bawerk to describe Marx's argument as "a theoretical juggle of almost stupefying naivete."[11] Cost accounting in terms of labour might have some relevance to a stage where mechanical aids of production are unimportant but is obviously unsuited to modern times.

The energy-cost method suggested by the technocrats relates the cost of goods to the quantity of energy embodied in them. The cost may thus be reckoned according to the units of foot-pounds or kilowatt-hours or therms or calories that have gone into the making of an article. The defects of this method are the same as those of costing according to labour-time. For example, it ignores the fact that scarcity

[9] H. D. Dickinson, *Economics of Socialism*, p. 66.

[10] Marx, *Capital*, (Eden and Cedar Paul's Translation), p. 9.

[11] Bohm-Bawerk, *Capital and Interest*, p. 384.

of different kinds of labour is not necessarily proportional to the consumption of energy and that different means of production which are scarce in relation to each other cannot all be reduced to physical units. The belief that socialism can dispense with the pricing system and replace it with some sort of calculation based on units of energy has now been definitely abandoned by economists.

The price-cost method is based on the reasoning that the demand for consumption goods determines price and this price becomes ultimately the payment for the factors of production. Price no longer depends on an objective measure but on the market valuation of individual goods. In a condition of economic equilibrium, unless the market valuation is such that price covers cost, the goods will not be produced. A good should sell neither above cost nor below cost, for, in the former case the consumer is deprived of satisfactions that would have been obtained by a proper utilisation of his resources, in the latter case the society is deprived of satisfactions through a wastage of resources.

In the case of production goods, as in the case of consumption goods, whether in a capitalist society or in a socialist community the demand price is equal to the marginal product. In a system of accounting we have to take note of not only the ultimate factors of production such as land and labour but also the intermediate goods which represent stored-up resources and which are required for what Bohm-Bawerk calls roundabout methods of production. The intermediate goods are a stock of resources held through time and their storing-up entails an item of cost, known as interest. Moreover the production of intermediate goods involves a certain risk or uncertainty arising from unforeseen changes in technical processes or in the desires and tastes of the community and the uncertainty-bearing entails yet another item of cost which may be called a change for risk. All these elements of cost can conveniently be bound together into a system by the method of pricing.

H. D. Dickinson thus describes the position of equilibrium brought about by the pricing process. "All means of production are fully utilized; prices of all goods are equal to cost; if alternative methods of production are possible,

that one is chosen which yields the product at least cost; and finally a production good capable of alternative uses is so distributed between different uses that its marginal net product in each use is equal to the same quantity, namely to its price."[12]

The categories of rent, interest and reward for uncertainty-bearing are merely accounting prices. They form part of the system of costing but they form no part of any individual's income. Thus rent is not paid to the landlord, nor interest to the capitalist, nor profits to the organizer. All these will be paid into a fund, as it were, and the fund will be available for distribution.

It is shown that it is mathematically possible to determine from the data supplied by the statistical departments the quantities and prices (a) of consumption goods and (b) of the factors of production that are combined in making them. The mathematical apparatus of simultaneous equations, coefficients and parameters can be utilised in the whole process of price-determination.[13] There is one difficulty in the way of the mathematical solution of the price problem, namely that the data are continually changing and changes in conditions of production or in conditions of demand and supply cannot be expressed in fixed formulæ. For these reasons it is unlikely that the method of trial and error would be entirely given up in favour of the mathematical symbols.

The experts of the socialist economy would be assigning or imputing values to the factors as well as to the commodities. If, for example, in the case of a particular factor the valuation were too high the authorities would be unduly economic in the use of that factor with the result that there would be a surplus in the stock of that factor at the end of the productive period. On the other hand too low a valuation would bring about a deficit in the stock of that factor. Thus surplus or deficit would be the result of wrong valuation and by the method of trial and error and by a process

[12] H. D. Dickinson, *Economics of Socialism*, p. 73.

[13] E. Barone, "Ministry of Production" in *Collectivist Economic Planning*, ed. by Von Hayek.

of successive approximation the authorities will arrive at the right accounting prices.

The process of trial and error that helps to determine the actual prices in a competitive economy will do just as well in determining the accounting prices in a socialist society. It is by no means necessary for the Planning Authority to frame complete lists of the different quantities of all commodities that might be purchased at any possible combination of prices. Hayek and Robbins make far too much of the millions of equations at which the exchanges can take place. In a socialist economy no less than in a capitalist economy all that we need is a rough and ready approximation: *e.g.*, consumers try to lay out their income so as to get out of it maximum utility; producers seek such a combination of factors as will equalize marginal cost and the price of the product. Hayek and Robbins will be solving an equation daily whenever they decide to buy a newspaper or take a meal in hotel or engage in an assault on the socialist position. Given a community of 100 persons and 700 commodities we shall have to solve a system of 70,699 equations and given millions of persons and thousands of commodities we would have to exhaust the power of algebraic analysis but in the sort of competitive socialism that we have in view we dispense with mathematical calculus and adopt the practical solution given by the market mechanism.[14]

The principle of imputation is derived from the fundamental properties of demand and supply. It states that under conditions of free competition each factor of production will seek the highest remuneration while each entrepreneur will seek to get the factors as cheaply as possible. Supply and demand thus acting on each other every unit of any given factor will be paid at a rate equal to the value of the marginal net product in the given industry; and the distribution of the factor as between industries is in equilibrium when marginal net products are equal in all

[14] Robbins, *The Great Depression*, p. 151.
Hayek, "Socialist Calculation" in *Economica*, May 1940.
Lange and Taylor, *Economic Theory of Socialism*, p. 88.

industries. The marginal net product is defined as the value added to the total product of a combination of factors by the use of the last unit of the factor in question. In other words it is the difference between the value of the product when X units are used and when X—1 units are employed. Marshall's famous example of the brewer may be recalled: the proportion of hops and malt in the making of ale can be varied and then the extra price which can be got for the ale by increasing the quantity of hops in it is the marginal net product of the hops we are in search of.[15] But as Wieser has shown, the value added to the total product by the marginal unit of any factor is made up of two things, namely first the product of that unit and secondly same further addition to the total product resulting from a more intensive use of the other factors in the combination. Hence the value imputed to a marginal unit consists of its own contribution plus the product resulting from the additional use of all the other factors.[16]

The total remuneration paid for each factor is equal to the contribution of one unit multiplied by the number of units of that factor. And the sum of all the contributions of all the factors in the industry exactly exhausts the value of the total return. On these grounds we impute the remuneration for each factor.

[15] Marshall, *Principles*, 6th edition, p. 406.

[16] Wieser, *Natural Value*, p. 88.

Laws, "The Difficulty of Imputation" in *E.J.* 1933. p. 251.

THE ROLE OF COST IN SOCIALIST PRICING.[1]

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The problem of pricing in a socialist state, though in one sense old, is in its purely academic aspect the latest controversy in economic theory. Economists as well as pseudo-economists, adherents as well as opponents of socialism have for a long time tackled the allied problems of how value is created and how it is determined. Marx's labour theory, Proudhon's Exchange Bank, Robert Owen's labour notes, and their classical predecessor—Ricardo's theory of value and Adam Smith's "philosophical account of value"[2] whose beginnings are found in Locke[3]—were all attempts to analyse the problem. To this group of writings may be added N. G. Pierson's valuable article published in 1902.[4] All these analyses were the outcome of either propagandist or arm-chair interest, for socialism was nowhere practised but was considered utopian. The individualist theories of

[1] I am indebted to my friends Mr. S. L. Rama Rao and Mr. B. R. Subba Rao for valuable suggestions in the preparation of this paper.

[2] Whittaker: *The Labour Theory of Value,* (*Columbia University Studies,* Vol. XIX, No. 2).

[3] Edwin Cannan: *Review of Economic Theory,* p. 157.

[4] The problem of value in a Socialist Society by N. G. Pierson of Amsterdam. It appeared in Dutch in 1902 and its English translation is printed in Von Hayek: *Collectivist Economic Planning,* pp. 41—86.

value determination under conditions of perfect competition and complete monopoly covered the whole field of pricing. And even the many alternative theories such as the marginal utility, the cost of production, the marginal and equilibrium theories attacked no new problem.

After the Great War, Socialism became an actuality. The Russian Communistic state and the Socialist regimes and growing influences in Germany, France and Great Britain gave a new and serious turn to this problem of pricing. It could no longer be of a purely arm-chair interest. Even at this stage, however, only Russian and German economists in general interested themselves in the problem, because it was in their countries that socialism was no more a mere theory. To this period belong the writing of Mises,[5] Brutzkus,[6] Cohn, Webber and others.[7]

But the question of price fixing under Socialism grew in importance and discussions about it gathered strength in the third of these stages—roughly since 1929-30—as a result of two factors. One was the development of a new aspect of the theory of value, namely, the study of imperfect or monopolistic competition. The importance of this aspect of value was first realised by Sraffa in 1926[8] when he suggested that "the whole theory of value should be treated in terms of monopoly analysis." This was later on worked up by Chamberlain[9] and Mrs. Robinson.[10] This phase of price determination analysis breaking away as it did from the

[5] *Economic Calculation in the Socialist Commonwealth* 1920 Reprinted as Ch. III in Hayek *op. cit.*; *Socialism*, 1922 (Eng. tr. 1936) see specially pt. II.

[6] *Economic Planning in Soviet Russia*, 1935. (published in Russian in 1921-22)

[7] The writings of these economists appear to be in German only *Vide* bibliography in Hayek, *op. cit.*

[8] "The Laws of Returns under Competitive Conditions." (*Economic Journal*, 1926)

[9] E. H. Chamberlain, *Theory of Monopolistic Competition*, 1933. Also his article, *QJE*, 1929.

[10] Joan Robinson, *Economics of Imperfect Competition*, 1933.

traditional perfect competition and monopoly theories, gave a new impetus to the study of pricing in a socialist state, since perfect competition has no place in Socialism and complete monopoly of all production, large and small is almost impossible. The imperfect competition analysis did not falsify the traditional value theory but merely pointed out a new problem which had been overlooked by our predecessors. I regard this analysis as the real starting point of all recent discussions of the problem under consideration. Almost the first systematic, though incomplete, attempt at grappling with the question was that by Roper in 1931.[11] The second factor in arousing interest in the problem was the ideal and practice of planned economy. The Five Year Plans of Russia and the plethora of literature on planning during the last decade gave a practical bias to the question. Since Roper's analysis and more particularly since 1933[12] a great deal has been written on the problem of pricing in a Socialist State.[13]

Many questions have sprung up about the central problem—the role of money; the extent of real competition and of competing monopolies; the influence of rationalization on prices; the possibility of an accurate system of pricing, whether the English cost analysis is applicable; whether the Marshallian analysis of supply and demand curves, or the solution by way of equational system is applicable; the extent to which a free market for consumption goods and factors exists, etc.

The solutions offered also have been many but they are broadly of two types. One school consists of N. G.

[11] W. Crosly Roper, *The Problem of Pricing in a Socialist State*, 1931. Two other pioneers were F.H. Taylor, "Guidance of production in a Socialist State," *AER*, 1929; and H. D. Dickinson, "The Economic basis of Socialism," *Political Quarterly* 1930.

[12] It may be noted that Chamberlain's book (*op. cit*) was published in 1933, and his article in 1929 (*op. cit*); and Robinson's in 1933, while the Russian First Five Year plan related to 1928-33.

[13] The literature on this problem has been referred to in the following pages.

Pierson,[14] Von Mises,[15] Von Hayek,[16] Halm,[17] and Barone[18] who may be called "the Austrian sceptics". They contend that without free economic activity no workable price, value or costing system can obtain. There must be freedom of choice not only for present consumers' goods but for the future goods also *i.e.*, a free market for labour, for capital and capital goods. These do not exist in a socialist state, and, therefore, the economic principle must break down. 'It is not possible", observes Mises,[19] an avowed critic of socialism and an extreme Austrian sceptic, "to divorce the market and its functions in regard to the formation of prices from the working of a society which is based on private property in the means of production," for the motive force of the whole process is maximisation of profits. Economic calculation can only take place by means of money prices established in the market for production goods in a society resting on private property in the means of production.[20] Only under simple conditions can economics dispense with monetary calculation. The role of money may be the same under Capitalism and Socialism but its significance will be different.[21] The principle of marginal costs cannot apply in a socialist state.[22] Thus in a collectivist community

14 *Op. cit.* Pierson is not an Austrian but his ideas are.

15 Mises; *op. cit.*

16 Hayek, (a) "The History of the problem and the present state of the debate," in *Collectivist Economic Planning*, 1935.

(b) Socialist calculation—the Competitive Solution," *Economica*, May 1940.

(c) *Freedom and the Economic System* (Public Policy pamphlets, No. 29, University of Chicago press).

17 Halm, "Further considerations on the Possibility of Adequate Calculation in a Socialist Community," in *Collectivist Economic Planning.*

18 *Op. cit.*

19 *Socialism*, p. 137.

20 *Ibid.*, p. 142.

21 *Collectivist Economic Planning*, p. 92.

22 *Ibid.*, pp. 226-231.

economic calculation would be impossible and so "Socialism" is impossible.[23]

The other school may be called "the Believers" and is represented by Durbin,[24] Dickinson,[25] Dobb,[26] Hall,[27] Lange,[28] Lerner,[29] Knight,[30] Orton[31] and Roper.[32]

There are minor differences among these writers but they all believe in the possibility and practicability of pricing under Socialism. We might briefly consider the views of a few of these "Believers."

23 *Socialism*, pp. 131 and 135.

24 E.F.M. Durbin, "Social Significance of the Theory of Value" (*E.J.* 1935).
"Economic Calculus in a Planned Economy" (*E.J.* 1936).
"Note on Mr. Lerner's Dynamical Propositions," (*E. J.* 1937).

25 H. D. Dickinson, "The Economic basis of Socialism" (*Political Quarterly* 1930).
"Price formation in a Socialist Community (*E. J.*, 1930).
Freedom and Planning (*Manchester School*, Vol. IV. 1933).
Economics of Socialism, (1939).

26 M. Dobb, "Economic theory and Problems of Socialist Economic," (*E. J.* 1933).
"Economic theory and Socialist Economic" (*E. J.* 1935).
Political Economic and Capitalism (1937).

27 R. L. Hall, *The Economic System in a Socialist State*, 1937.

28 O Lange, "Marxian Economics and Modern Economic Theory" (*RES.* 1935).
"Mr. Lerner on Socialist Economics," (*RES.* 1936-37).
On the Economic Theory of Socialism" (*RES.* 1936-37).
O. Lange and Taylor, *F. M.* -*do*- (Minnepolis 1938).

29 A. P. Lerner, "Economic Theory and Socialist Economy," (*RES.* 1934-35).
"A Rejoinder to Mr. Dobb," (*RES* 1934-35).
"A note on Socialist Economic," (*RES.* 1936).
"Statics and Dynamics in Socialist Economics," (*E. J.* 1937).

30 "Place of Marginal Economics in a Collectivist System," (*AER.* 1936, Supplement).

31 Discussion in Knight's paper, *op. cit*, and Gourvitch, "Problem of Prices and Valuation in the Soviet System," (*AER.* 1936, Supplement).

32 *Op. cit.*

E. F. M. Durbin demonstrates the theoretical possibility of a pricing system in a socialist state. Planned economics according to him,[33] differs in no way from the *laissez faire* system that renders them less suited to solve the problems of economic calculus, the central problem of which is the allocation of resources. There is in planned economy a free market for consumption goods and for factors. Marginal costs can be used to guide the distribution of resources—a position which the Austrian Sceptics reject. Durbin holds,[34] that the Cannanian and Pigovian solution by way of marginal products applies with equal force to *laissez faire* or to the planned system. "All logical, theoretical and accompanying problems," observes Durbin,[35] "are common to both types of system. It may be very difficult to calculate marginal products. But the technical difficulties are the same for capitalist and planned economics alike." The movements of resources would have to be based upon *estimated* and not upon realized marginal products. He believes that at present the theory of value has been used as a part of the rationale of the institutions of individual enterprise. "The theory of competitive equilibrium", he remarks,[36] "can cover only a part of the economic field. Any end which cannot be atomised cannot be dealt with by such an economic analysis". Such ends are common and cannot be brought within the scope and calculus of competition. "Where ends presuppose a social choice, the central organization and control of economic life is essential."

Similar ideas are held by H. D. Dickinson.[37] "Pricing is independent of any particular organisation. Mises has confused the *essence* of the pricing process (the application of the pricing principle) with the particular form under which it is manifested in the capitalist economy (the market and private ownership of production goods)" Dickinson

[33] *E. J.*, 1936, p. 676.

[34] *Ibid.*, p. 677.

[35] *Ibid.*, p. 678.

[36] Social Significance of the theory of value, *E. J.* 1935 pp. 702.

[37] *Economics of Socialism*, p. 115.

accepts price as a measure of cost and writes[38] "One fundamental principle of economic equilibrium under the price system is that the selling price of every goods should equal its cost as imputed from the prices of other goods." He once[39] firmly believed in the possibility of solving the problem of socialist pricing by a system of simultaneous equations by the central authority—an idea completely rejected by the sceptics and even by Durbin and others—but later[40] he is doubtful about its success. Dickinson's latest suggestion [41] is that of "Libertarian Socialism" or, as Hayek calls it,[42] 'Competitive Socialism.' Since O, Lange[43] also has an idea akin to Dickinson's I shall describe their views together.

Dickinson and Lange refuse to allow prices to be determined directly in the market. A central authority—called the Central Planning Board by Lange and Supreme Economic Council by Dickinson—is to fix the prices. By the use of statistically established demand and supply schedules and by a process of trial and error, the equilibrium price is to be determined by the authority *i.e.*, the state of the market for a particular commodity would serve as an indication whether the prescribed prices are high or low. While the actual prices of consumer's goods and wages may be fixed by the ordinary market processes, all other prices must be determined by the central authority, which from time to time issues "factor valuation tables" or prices of means of production which will form the basis of allocation of resources and all transactions.

Similar to 'competitive socialism' is A. C. Neal's idea

38 *Ibid.*, p. 72.

39 Price formation in a Socialist Community, *E. J.* 1933.

40 *Economics of Socialism*, p. 104.

41 *Ibid.*, p. 26.

42 "Socialist Calculation—the Competitive Solution," *Economica*, May 1940. This article is an able, though unconvincing criticism of the idea.

43 Lange and F. T. Taylor: *On the Economic Theory of Socialism.*

of 'partial planning.'[44] He attempts to determine whether the general theory of value can be extended to cover "partial planning" and to discover whether rational distribution of resources and free choice to consumers are possible in an 'interventionist economy' not completely planned. His conclusion can best be stated in his own words.[45] "It remains to be demonstrated (1) whether the terms upon which alternatives are offered for collective demands can be known in a socialist state, and (2) whether the terms upon which alternatives are offered can be known for collective demands in a semi-competitive capitalistic society. It is the contention of this article that knowng the terms sufficiently well to meet the usual standards in economic analysis is palpably impossible in the latter case."

According to W. C. Roper,[46] one of the early writers on this subject, the probem of pricing is purely economic one and absolutely fundamental. It must be dealt with by any collectivist economy which aims at a successfu economic existence. Some pricing apparatus is therefore necessary. In free or capitalist economy this need is met by money. Pricing directs production along economic lines and corrects maladjustments in the system.[47] Some money computation similar to that of capitalist economy will be a necessary condition for the success of any socialist attempt. "In so far as the Collectivist state maintains autonomy of its industries and private enterprise," observes Roper[48] "the pricing problem remains substantially that of capitalism, with markets for factors of productions like those of the present society. In such a state there could be no question of abandoning a pricing process." Discussing the principles

[44] "The 'Planning Approach' in Public Economy," *QJE*, February, 1940. R. Musgrave in his article "The Voluntary Exchange theory in Public Economy" (*QJE*. 1939), approaches the problem of collective activity though the theory of Public Finance, rejects the voluntary exchange theory and then proposes as a substitute the "partial planning approach."

[45] *Op. cit*, p. 253.

[46] *Op. cit*, p. 9.

[47] *Ibid.*, p. 18—21.

[48] *Ibid.*, p. 22.

guiding pricing of the productive resources he writes[49] that the socialist pricing process is essentially the same as that of the present economy, and that this is not coincidence but must necessarily be so. He agrees with J. S. Mill's dictum that the laws of production are unchangeable while those of distribution are alterable. "A socialist system may alter the distribution of wealth, but in its pricing policy which relates to production it must be guided by principles which are fundamentally the same as those of capitalist society"[50] The costs of products may be computed according to the prices of the factors used, multiplied by the number of units required by each commodity. At this cost price, adds Roper, goods will be offered to consumers on the market, and their response will regulate further production, and prices will be allowed to vary so as to equate demand and supply.[51]

"The problems of collectivism" observes another economist,[52] "are not problems of economic theory but political problems," and the economic theorist as such has little or nothing to say about them. The collectivist economy, continues Prof. Knight, would necessarily economise resources in the use of satisfying wants; and this necessarily means that it would strive, consciously or unconsciously, so to allocate its resources among the different want-satisfying uses in accord with the principles of marginalism. "For the principles of marginalism are the logical, mathematical and hence universal principles of economy, *i.e.*, of maximising the return from any resources, used in accord with any technique, to secure any form of return.[53] If a socialist economy actually plans rationally for the future, capital accounting must be much more extensive and important than under individualism. Knight believes[54] that under conditions of free consumption and stationariness, in a

[49] *Ibid.*, p. 49; see pp. 32—48, also.

[50] *Ibid.*, p. 50.

[51] *Ibid.*, p. 57.

[52] Knight, "Place of Marginal Economics in a Collectivist System." A. E. R., 1936 Supplement, p. 255.

[53] *Ibid.*

[54] *Ibid.*, pp. 259-60.

socialist state the prices of goods and services for direct consumption, would be fixed "on the short run marginalistic principle of maximum demand price for the given supply, taking individual tastes and incomes (purchasing power) also as given, exactly as in the individualistic competitive economy; and that the goods and services would also be apportioned among the people in exactly the same way. Differences between the socialistic and the enterprise economies would be restricted to the content of the three sets of data—supplies of goods, tastes and purchasing power and to the long run conditions controlling them."

These ideas have been asserted, criticised, modified and restated by the debaters. I do not propose here to evaluate any of them. There is, however, one aspect of the problem on which almost all these writers are agreed, but which few appear to have considered in all its aspects, *viz.*, the role of cost of production in price determination under socialism. Durbin applying the English cost analysis assumes[55] that the factors and consumption goods must be sold for cost and that quantity is largely influenced by effective demand. He asserts that marginal costs—the term costs being used in its capitalistic sense of entrepreneur's cost—guides distribution of resources. Dickinson also writes[56]: "One fundamental principle of economic equilibrium under the price system is that the selling price of every good should equal its cost as imputed from the prices of other goods." "Costing is therefore linked naturally to the process of price determination, according to scarcity and consumer's preferences"[57] Von Hayek holds[58] a similar view of the relation of cost to price. Roper writes[59] that a state sells products at a price covering their cost of production and this is not so much an assumption "as a consequence of the proposition that the aim of the state is the maximisation of the satisfaction of its members. In general it is true that this

55 *E. J.* 1936, p. 679.

56 *Economics of Socialism*, p. 72.

57 *Ibid.*

58 *Collectivist Economic Planning*, pp. 226—231.

59 *Op. cit.*, p. 27.

end is attained by equality of cost of production and sale price" Roper adds[60] that the exceptions to this rule are of little practical importance for state action.

It is this idea of cost determining price being a fundamental principle that I shall examine in this paper. I shall point out that theoretically cost of production may be absolutely unimportant in determining prices in a planned economy and that practically even in our own economy, which Von Hayek calls "interventionist chaos,"[61] the prices of certain goods and services supplied by the state are undetermined by their cost of production. The fundamental difference between capitalistic and socialistic pricing appears to me to lie in the importance of cost of production in the determination of value.

In a capitalistic society the supply price has always a great influence on price fixing. It may be in some circumstances the average cost, in others marginal cost; it may be the supply price of the optimum firm or of the marginal firm. Whichever it is, cost has an important bearing on normal price. No doubt, the influence of the nether blade of the pair of scissors varies with the element of time and the conditions of production.[62] Thus under perfect competition the supply price is all important in long period markets where there is a tendency towards constant returns and static conditions. Demand determines quantity, and cost of production, price. In the short period cost is of less importance but influences price equally with demand. Marginal costs in the case of decreasing returns and average costs in the case of increasing returns are important. In the case of temporary equilibrium, however, the supply price plays very little part. But this kind of market is not of much theoreti-

[60] *Ibid.*, p. 65.

[61] *Collectivist Economic Planning*, p. 24. "We are certainly as far from capitalism in its pure form," writes Hayek "as we are from any system of central planning. The world of to-day is just interventionist chaos."

[62] R. Opie, "Marshall's Time Analysis," *E. J.*, 1931. Rosenstein-Roden, "Role of Time in Economic Theory," *Economica*, 1934. Marshall, *Principles of Economics*, Bk. V. Chs. I—II, and V.

cal importance. Thus it is evident that in a completely competitive market, normal price is largely influenced by cost of production.

The story is not very different under imperfect competition.[63] Cost is no less influential in complete monopoly in a capitalist society. In does not of course directly determine the price. For price is fixed either by the monopolist allowing demand to determine the quantity or the quantity is fixed by him letting demand determine price. In both these cases, cost of production fixes the minimum price or the lower limit and it is the actual price that is settled by the monopolist or by demand. This is true both in the case of a true monopoly, *i.e.*, where maximum revenue is aimed at and in the case of "Compromise benefit"[64] where for public policy or similar reasons the monopolist either increases the quantity or reduces the price so that his revenue is less than the maximum, the price lower and the public benefit larger. But even in the latter case, the lower limit is fixed by cost and no monopolist will allow the price to come down to the level of his cost of production.

There is however one circumstance where monopoly price is less than cost in a capitalist society *viz.*, dumping.[65] Dumping and discriminating monopoly[66] may exist for various reasons may be of many kinds and assume manifold forms. But the fundamental fact remains that all these are only instruments for realising the maximum revenue. The loss in one market is more than made up in another. And even this loss is only temporary. The length of the period of dumping is immaterial since as soon as the competitor is ousted out or the market captured or demand created the monopolist raises prices and exploits the consumer. So long, however, as dumping exists, cost has little influence on

[63] See Chamberlain, *op. cit.*, and Robinson, *op. cit.*

[64] Marshall, *op. cit.*, p. 488.

[65] J. Viner, *Dumping: A Problem in International Trade*, 1923 (University of Chicago press), *Memorandum on Dumping* (League of Nations II 69.)

T. O. Yutena: Influence of dumping on monopoly price (J. P. E. 1928).

[66] Pigou: *Economics of Welfare.*

price, but, this is essentially a temporary feature of the capitalistic world. As long as "the minimum loss and maximum profit" principle prevails prices under capitalism cannot be permanently less than the cost and will largely be influenced by it.

In fact, in the case of joint supply, we clearly notice how the special cost of production of one of the joint products forms its minimum price and the joint cost is divided according to demand, so that the prices of all the joint products together must be at least equal to their joint and special costs of production.

It is thus clear that cost of production forms an integral part of price determination and that goods cannot under capitalism be sold permanently for less than cost. This is so because the cost to the individual producer or the unit is important, and the principle of private profit is the major incentive of all capitalist economy.

In a socialist state, however, prices of goods and services may permanently be below cost and in fact, cost of production of one or more goods may have no influence on their prices. The supply price of any commodity or in any particular socialised industry is of little count. As Alexander Gourvitch puts it[67] "Unlike a private individual a socialised enterprise may well be made to sell at low prices or buy at high ones, or both, irrespective of its cost and financial requirements." For the aim of the state is not the maximisation of profit or even the minimisation of loss but essentially the maximisation of social benefit. There is no reason why "the valuations which underlie the balancing of costs and satisfactions must be exclusively those of individuals. This is the economic equivalent of the political atomism of the French Revolution; and it is everywhere being given up in practice. Why? because we have found by bitter experience that it has not produced an economic equilibrium. What is a genuine equilibrium? It is essentially a three-dimensional affair, in which time is of the essence. Society is at least as real as the individual of

[67] "The Problem of Prices and Valuation in the Soviet System," *A. E. R.* 1936, *Supplement*, p. 268.

Classical economics; and a true valuation of the future from the social point of view is by no means necessarily identical with the discounting of the future made by individuals acting under the pressure of a competitive market. The equilibrium produced under the latter conditions is specious, transitory and unstable; it is here to-day and gone to-morrow. We have no right to assume that the allocation of resources between present and prospective needs which results from a purely individualistic discounting of the future gives a result which is rational from the standpoint of society as a whole."[68] To the capitalist enterpreneur the factory or the industry is the productive unit for purposes of cost calculation; to the state society itself is the unit for calculating sacrifice and benefit. To the individual producer profits must be extracted from the consumer to be enjoyed and the producer and consumer are for purposes of price determination different entities. In planned economy, the consumer and producer are the same and so the cost element as interpreted under individualism loses all significance in price determination. The socially most desirable output, in kind as in quantity, may be very different from that which is most profitable to the individual firm. "The arrangement of the scarce factors demanded by the social ends," writes Durbin[69] "may be in conflict with that required by individual ends . . . . the truth is that a theory of competition cannot be made into a theory of general productive equilibrium because it cannot treat certain important types of production at all. For certain types of production the whole economy is the unit."

Under socialism social cost in terms of social welfare becomes the criterion of price determination, social cost is real cost but is not the aggregate of individual costs of production. It may be more or less—according to the repercussions of production on society. The divergence between social cost of production[70] and individual or entrepreneur's

[68] Prof. Orton's remarks on Gourvitch's paper (*A. E. R., Supplement* p. 287).

[69] *E. J.*, 1935, p. 703.

[70] *Vide* Pigou: *Economics of Welfare*, Pt. II, Ch. 11.

cost as Knight puts it[71] is considerable and important. Undue use or wasteful or wrong use of factors of production, occupational diseases, industrial accidents, pollution of the air by smoke and fumes, the physical and moral degeneration of the race as a result of the conditions in factories and factory towns, the increase in crime and intoxication, poverty, misery—these ars some of the real or physical costs which society bears but not the private entrepreneur. Public expenditure on education, research, social services, public works, etc., are items forming part of social cost but not a part of the entrepreneur's cost which includes only those heads for which he has to pay a price. These items are in the nature of social overhead costs.[72] "An economic system based on private enterprise can take but very imperfect account of the alternatives sacrificed and realised in production. Most important alternatives like life, security, and health of the workers are sacrificed without being accounted for as a cost of production. A socialist economy would be able to put *all* the alternatives into its economic accounting. Thus it would evaluate *all* the services rendered by production and take into account the costs of *all* the alternatives sacrificed; as a result it would be also able to convert its social overhead costs into prime costs."

The recovery of these costs may be made directly in the form of goods produced by the state—prices higher than their apparent cost of production in the capitalist sense. More often they are not charged in the price which may be lower than the prime cost itself, because it is society as a whole that must bear the cost and enjoy the benefit. It is, therefore, immaterial whether even the entrepreneurs' or prime cost forms the price or not. By enjoying the goods at a low price society benefits and by paying taxes or a higher price for some other commodity society sacrifices. So price of any commodity in relation to its cost of production is a matter of indifference.

[71] "Some Fallacies in the Interpretation of Social Cost," *Q. J. E.*, 1924.

[72] *Vide* J. M. Clark, *Studies in the Economics of Overhead Costs*, p. 397.

Such pricing below cost may be affected by various factors which do not exist in a capitalist society. The low level of prices as well as the apportionment of social resources and the function of planned prices is largely determined by the specific objectives of the plan rather than by the largely restricted or regulated, directed and regimented consumers' choice, much less by cost of production of the commodity. Further, the extent to which the price is lower than cost may differ in different goods. In discriminating monopoly differences in prices between different units of the same commodity in different markets are based on the nature of effective demand so as to maximise profits and sell the largest quantity at the highest price. But in charging different prices, the socialist state is guided by the nature of social want and need rather than effective demand. The type of article has also its influence on the price. Thus necessaries and simple comforts may be sold for very much below the cost than luxuries. Likewise goods and services of national importance, *e.g.*, transport service or water and gas may have a price much lower not only than cost but than other goods of less importance, although all these goods may be available for less than their cost. In other words, social want and welfare may determine both the quantity and the price of goods, without any reference to their supply price or even to the demand price. In fact, goods and services may be given to the people free if social welfare is so maximised. Thus, free compulsory education is made up of service, *e.g.*, teachers, administrators, etc., and of goods such as furniture, buildings, books, etc., and it is given away to the people for no price and the cost does not determine the price. Other examples are medical relief, housing and social science schemes. All these though costing a great deal, are supplied by the state for nothing because the principle of social welfare, rather than of cost of production or maximising profit rules in a socialistic state. Often a nominal price may be fixed. Such free services and goods or even at a nominal price are impossible in a purely capitalistic state because the cost of production largely determines the price.

In fact, in the U.S.S.R. some goods are sold below cost. "While, however, the guiding principle is that of having

prices assessed at cost plus, there may be and there have been indeed substantial departures from it. Goods may be and have been sold below cost, or else at a price exceeding costs by a much larger margin than the average profit rate; and cost reduction has not been necessarily in every case passed on in full in the shape of reduced prices,"[73] *e.g.*, in the case of fuels and metals and such other basic materials.

Such permanent sale below cost may relate to all goods and services or to some only. The loss resulting from the cost being higher than the price is only apparent since it is the community as a whole which is both the producer and the consumer, unlike in an individualist state where the two are different. However, even this apparent loss is made up. If only some goods are sold below cost, the profits resulting from other socialised industries makes up the difference. These profits relate to those undertakings in which there is no monopoly element. The state is in the same position as any other competitor and its gains are pure profits. There is also the income to the state from its monopolies. Further, even if *all* goods are sold below cost, taxes will make up the loss. In fact this is the practice in Russia[74] "An outstanding characteristic of Soviet finance has been the diverting of earnings from the more profitable industries or enterprises into such others as are immediately less or not all profitable but have been planned to be furthered, nevetheless, as a matter of policy." Revenues from taxes levied on individuals, on whatever is left of private enterprise, and on socialised enterprises, from subscription to government loans, and from statutory deductions into the budget from the profits of government owned enterprises have been applied to finance, activities that are not or not sufficiently self-financing to cover losses, to supplement profits, and to supply funds for capital investment."[75] It is this revenue and the fact that social welfare and not profits from undertakings is the aim and that the state is one unit for

[73] Gourvitch, *Op. cit.*, *A. E. R.* 1936, *Supplement*, p, 268,

[74] *Ibid.*,

[75] *Ibid.*, page 269.

purposes of production and consumption, that largely account for (1) the theoretical possibility of goods being sold permanently at less than their cost and (2) the negligible influence of cost of production on value.

This tendency in the socialist state is only an interpretation of what Marshall calls[76] "the doctrine of maximum satisfaction"—an interpretation different from that given by the Classical economists. According to Bastiat "a position of (stable) equilibrium of demand and supply is a position also of maximum satisfaction." The equilibrium is settled under competitive conditions by the supply and demand factors. This idea was the basis of the Classical doctrine and of individualism that the free pursuit by each individual of his own immediate interest will lead producers to turn their capital and labour, and consumers to turn their expenditure into such courses as are most conducive to the general interests: How this idea is modified by differences in wealth and in cases of increasing returns and specially of multiple equilibria is clearly pointed out by Marshall.[77] What is important to us is the broader or socialistic interpretation of this doctrine of how production beyond the point of equilibrium and how sale below cost of production increase satisfaction. It is this interpretation of the doctrine that underlies pricing in socialistic states especially with regard to production under state control.

A final question arises: How far can the state anticipate and satisfy social needs and thus adjust social cost to the prices of individual commodities? It is hardly necessary to emphasise that the present system is admitted by its supporters[78] as one in which perfect pricing is an ideal rather than a fact, in which maladjustments of considerable extent are a matter of considerable experience and that this is due to the limitations of human abilities. Even the ablest entrepreneur has his limitations. Further, "It is not economic preferences as *such* which determine the course of competitive enterprise but only those ranges of preferences

[76] *Principles of Economics*, Bk. V, Ch. 13.

[77] *Ibid.*, pp. 471-472.

[78] E. g., Roper, *op. cit.*, p. 60,

which have survived some precious or more fundamental process of social selection. Without a detailed insight into the methods and principles of this selection, we can construct no true theory of production and exchange.[79] It is this insight that planned economy attempts to get and it is these human limitations that stand in its way also. The state attempts to compare social cost and social benefit so as to lower the price and increase the quantity that yield maximum social welfare. And the success is entirely dependent on the ability of the state to measure social cost and benefit.[80]

Thus we might conclude that under capitalism the supply price plays a very important part in price fixing, its influence varying with the kind of market and the degree of competition. Of the three types of conditions *viz.* perfect competition, imperfect or monopolistic competition and monopoly, cost is most important in the first and fixes the minimum in the third. In the second type, it plays an important, though less prominent role than under perfect competition. But in no circumstance can a producer sell permanently below his supply price. Under socialism, however, perfect competition does not exist. The other two types, *viz.*, imperfect competition and monopoly may well prevail, the latter being more in evidence, and the principles underlying price determination are the same in the capitalist and socialist societies, excepting in so far as the broader interpretation of cost, *viz.*, social cost, might be considered in the latter. Under the system of planned prices, production and distribution motivated by social welfare, entrepreneur's cost, *i.e.*, the supply price in each industry and for each type of goods may have littte influence on price, and, in fact, as in some cases in the U.S.S.R. and in the case of social services, goods may be sold permanently below their cost. Such a characteristic feature of socialist pricing can theoretically be universal.

79 Durbin, *op. cit.*, *E. J.* 1935, p. 707,

80 See in this connection, O. Lange: *On the Economic Theory of Socialism*, Pt. I, Section 3 and 4, dealing with the trial and error procedure in a socialist economy. (*Review of Economic Studies*, 1936-37 pp. 60—71)

The approach to the problem of pricing suggested in this paper has been neglected so far, because we have forgotten the fact that all economic theories are "expressions of the economic dynamics of the representative periods." The capitalist theory of pricing is restricted to a particular environment and is based upon certain social institutions and ideals. As K. H. Niebyl remarks[81] "In attempting to construct a theory of value, we must transcend the limited boundaries of a particular social group, *i.e.*, we must go beyond the point of view which derives from a particular function within the whole socio-economic process, if we are able to explain particular economic events on the basis of the movement and interdependence of the social process as a whole . . . . As soon as a theory of value of a dominant group has succeeded in becoming predominant, it tends to become static . . . . If the theory of value of a preceding period is consciously or subconsciously employed in the analysis of the succeeding reality, such coincidence will prove impossible, and if nevertheless taking place, can be described as a statistical accident." We might conclude with Niebyl's observation[82] "First, an adequate theory of value should contain the concept of organic change; secondly, it should rest upon the realisation that the processes observed represent interdependent human actions and that the very statement of a theory of value is in itself an action; thirdly, such organic change is identical with qualitative change."

SUMMARY.

[This paper suggests that the real starting point of all recent discussions of the problem of socialist pricing is the development of the imperfect competition theory of value, though the theory and practice of planned economy have given it a practical bias. The solutions offered by the "Austrian Skeptics" of the Mises School and by he "Believers" of the Dickinson school are discussed.

[81] "The Need for a Concept of Value in Economic Theory," *Q. J. E.*, February, 1940; pp. 210—12.

[82] *Ibid*, p. 216.

The views of Dickinson, Lange, Durbin, Roper, Knight and others are reviewed.

It is pointed out that neither school has recognised the peculiarity of cost in socialist pricing, *viz.*, while entrepreneur's cost of production is an essential factor in price determination in a capitalist society, in planned economy it may have no influence on value.

The role of cost in a capitalist state is briefly pointed out. Under Socialism, since social welfare and not individual profit is important, entrepreneur's cost is of no importance. It is social cost that matters. Social cost differs materially from entrepreneur's cost. Since the whole society is the unit for purposes of social benefit and society is both the producer and the consumer, equalisation of cost and price as in an individualist economy is of little account under socialism. Illustrations are given from Russia and from other societies of the "interventionist chaos" type to support the contention.

The extent to which price will be below cost depends on various factors *viz.* the objective of the plan, the nature of social wants, the type of goods and services, etc. How the apparent "loss" is made up is discussed.

This tendency under socialism is interpreted in the paper as an extension of the Marshallian doctrine of maximum satisfaction.

The extent to which the social needs could be anticipated and production and prices adjusted depends on the ability of the planning authority, but the problem is not more difficult,— perhaps it is easier, than under capitalism. Thus two conclusions are drawn *viz.*, the negligible influence of entrepreneur's cost of production on value and the theoretical possibility of goods being sold permanently below their cost.

This approach to the problem has been overlooked so far because the capitalist theory of pricing is static and we have forgotten that all economic theories are expression of the economic dynamics of the representative periods and that we must transcend this limitation.]

VALUE IN A SOCIALISTIC STATE

By

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"Principle of Pricing will remain unchanged even where the state is owner and director of means of production."

"It is untrue that free competition is a theoretically necessary condition for giving effect to the principle of cost."

Gustav Cassel: *The Theory of Social Economy.*

"A socialist community would know exactly—or it would imagine it knew—what it wanted to produce. It ought, therefore, to set about obtaining the desired results with the smallest possible expenditure. But to do this it would have to be able to make calculations of value. They could not be merely technical; they could not be calculations of the objective use values of goods and services. This is so obvious that it needs no further demonstration."

Von Mises: *Socialism.*

A Speculation of Practical Importance

In what manner value will emerge and operate in a socialistic economy, is a question of considerable theoretical and practical importance. Theories of value that are known to us are forms of generalisation based on past or present experience. They are mainly analytical. As the working of a socialitsic economy is as yet neither wide-spread nor long-lived, one can theorise about value in a socialistic state only in a more or less speculative fashion. It is an essay in projecting the known into the unknown. The effort, however, is bound to be helpful in perfecting our knowledge about value.

The practical urge towards defining the operation of value in a socialistic economy is even greater than the theo-

retical one. A substantial socialisation of the means of production is no longer a distant ideal or a cherished or dreaded (according to one's stand-point) dream but a quickly unfolding phenomenon. Wars and depressions have proved even more potent than socialist propaganda. A study of the probable behaviour of the basic economic factors in a socialistic state is no more than timely at the present moment.

As the extracts given at the head of this paper would show, eminent economists are inclined to take the most divergent views on the subject. While for Cassel no special problem of pricing exists in a socialist economy, as distinguished from a free or capitalist economy, for Von Mises every step away from the private ownership of the means of production is a step away from rational economy. Faced with such a sharp conflict of opinion, we can only proceed from known fundamentals to probable, hitherto unknown, situations.

Nature and Function of Value

Value is the ratio of our marginal preferences for the goods. Non-economic preferences that is likes and dislikes which do not result in a balancing of satisfaction earned and cost or disutility incurred, are not correlated by a value ratio. It follows, also, that likes and dislikes for objects that are not economic goods, either because they are inaccessible or because they are abundant, do not form the subject-matter of economic valuation.

As value is a ratio of our marginal preferences, it serves a very vital purpose as governor and guide of all economic activity. Given the means, a consumer tends to spend them in such a way as to equate marginal satisfactions from all his expenditures. By having to pay more for what satisfies him more, and by being called upon to pay less for what satisfies him less, the most economical disposal of the consumer's resources is promoted. On the other hand, the supplier finding it more advantageous to supply that which is in greater demand, in preference to that which is less, has a ready index to guide his activity. A balance between total outlay and total satisfaction, both collective and indivi-

dual, is thus induced by the operation of value judgments on the part of consumers and producers.

There is another, more indirect but not less vital, function that value has to perform. Given the consumers' resources, their demands and the latter's influence on value, a producer can resort to that method of production which is most economical with reference to a given price level. The prices of factors of production, judged in the light of their productivity and the anticipated valuations of their products at the hands of the consumers, are a helpful guide to producers. What factor should be used at the magrin in preference to another, is decided by the ratio of costs to be incurred for their acquisition and the additional price to be realised by the sale of the products. The correlation between several sets of anticipated prices and costs helps, from the producers' and the community's stand-point, in the most economical use of all available resources.

Value in a Free or Capitalistic Economy

In respect of the technical importance of capital, as compared with other factors of production, all civilised society is capitalistic. But the social domination of capital arises out of private ownership. Even communistic society is, in a sense, capitalistic if it uses capital on a large scale. It is, therefore, better to contrast unregulated or individualistic against controlled and socialistic economy. By long usage, however, the former has come to be described as *the* capitalistic economy.

In capitalistic economy supply is adjusted to demand through price. Any disequilibrium is corrected by the reaction of profits on supply. Hence there is a general tendency towards an equilibrium between prices on the one hand and the relevant effective demands and available supplies on the other. Prices indicate the ratios of marginal preferences, therefore are mutually dependent and no one preference can stand alone without affecting or being affected by other preferences.

Given the tastes and earnings of people, it is true to say of a capitalist economy that for all articles and services that are exchanged on a market, such a price tends to establish

itself as equates the effective demand to the available supply. The services even of the factors of production are not free from this 'Law' of general equilibrium. Given the state of technological progress, such a level of earnings tends to establish itself in respect of each factor as tends to equalise the supply of that factor with the demand for the same. Not only the satisfactions of consumers but the employment of productive factors is thus regulated by one and the same principle, that of value.

In regard to this general principle of value in a capitalistic economy, two things must be specially noted in the present context. The statement of a tendency towards a general equilibrium assumes the existence of a competitive market. To the extent to which non-competitive markets are a feature of capitalistic economy, deviations from an equilibrium among prices, supplies and demands become a normal and not an exceptional feature of the economy. In the second place, the factor market is so much influenced by the institutional life of the community that the influence of prices in the direction of securing a most economical adjustment between demand and supply is far from assured. Except within the narrow sphere of marginal substitution, the supply, productivity and utilisation of factors are matters for which dependable calculations cannot be easily made. Not only the supply of workers, but to some extent of all factors of production is highly institutionalised, and to that extent partially withdrawn from the sphere of economic calculation and employment.

What is a Socialistic State?

The element of the unknown with regard to the form and significance of value in a socialistic state begins to assert itself from the very outset. What is a Socialistic State? Is complete abolition of private possession, of free choice or of money a necessary feature of socialist economy? In some of the Utopian or purely idealistic schemes of social reformers a complete socialisation of wealth and its distribution according to some common plan has been thought of. It is, to say the least, doubtful whether even such a communistic society may not be required to use some tokens of

account which would correspond to money. It is, however, more important to note that a community can be socialistic without the complete abolition of private property, free choice and money.

A community which allowed the possession of wealth but disallowed its use for production would justly be called socialistic, though not communistic. It is equally true that a socialistic community without the sacrifice of any essential principle may allow perfect freedom of demand to the consumer. It must be recognised that faced with a single supplier of all goods the actual freedom of demand enjoyed by consumers will be liable to a serious restriction. Such a restriction is, however, likely to arise more out of the non-economic than the economic objectives of the supplier. Economically, the existence of a socialistic state is compatible with the toleration of free demand.

What applies to demand is equally true of employment of labour. While all means of production must necessarily be collectivised in a socialistic state, the special position of labour has to be recognised. Labour is not only, and, at any rate in a socialistic society not primarily, a factor of production. The human members of a community exist for realising a certain standard of collective and individual life. Having to contribute their personal labour for the creation of the means of such life is mostly a subsidiary activity. With a view to preserve the non economic values of the community, freedom of employment may be conferred on its members by a socialist state.

Whenever employment is free it becomes economically necessary to adjust the supply of each kind of labour to the demand for the same. Such non-economic means as propaganda or training might be followed to gain the economic balance between the various types of services and the need for their employment. On the other hand, it is conceivable, and in fact very probable, that a socialistic state will find it necessary to rely on remuneration or pricing of services as a method of stimulating or retarding their supplies.

As has been observed above, even a purely communistic society will, in all probability, feel called upon to constitute some tokens of calculation. The use of such tokens

will become all the more unavoidable, as the elements of free possession, free demand and free employment are to any extent tolerated. In fact, in an important measure such an economy would necessarily be an exchange economy, in which the problem of value tend to rise very much in the same way as in the capitalist economy more intimately known to us.

It will thus be seen that the only essential feature of a socialistic economy is the denial to all but the state of the possession and direction of the means of production. Any concession made to private parties on the score of the productive use of their possessions would detract from the socialistic character of an economy. But an economy may justifiably claim to be socialistic while yet tolerating free possession, free demand, free employment and a more or less unrestricted use of money. A socialistic is necessarily a collective, but not unavoidably, a communistic state.

Collective Goods

All goods are collectively produced both in a socialistic and a communistic state. But while in the former some goods at any rate may be freely, *i.e.*, competitively or individualistically, consumed, in the latter none are left to be so consumed by the members of the community. The state prepares the demand schedules of all its members and proceeds to supply these in the manner that it considers most economical.

In the absence of free exchange the most economical production has to be objectively or technically determined. Here comparable limits of calculation, such as money equivalents for prices and costs, are indeed absent. But this is not to say that there is no check on the errors of technical or positive calculations. A perfectly communistic economy would be no better and no worse in respect of economy of production, distribution and consumption, than a family or clan is. The scale would be immensely greater, but the principle of adjustment between effort and satisfaction would be the same. And the principle would be a very rational principle, though it may not be reducible to any comparable units of measurement, *e.g.*, money.

The securing of equi-marginal returns for all the outlays of the community's resources would be this principle. If after a certain disposal of productive resources, the contollers of social economy feel that the saitsfactions that they have foregone in one direction are not sufficiently balanced by satisfactions earned in another, there would be cause to readjust the disposal of factors. This process of re-adjustment among alternative uses of scarce means would go on till the state of equi-marginal satisfaction is reached. Like the general equilibrium in capitalistic economy this stage may in fact be never realised. But it would still continue to be the norm to which all economic activity of the community tends to gravitate. This would be rational enough.

Even a purely communistic economy may thus attain the purposes of economic life. But this would happen without the emergence of the problem of exchange value. A communistic society may *value* some things more than others, and may, therefore, be prepared to incur greater cost for acquiring the former. Value in the sense of a scale of preferences will certainly exist in a communistic society and will guide economic activity, both in consumption and production. Value, however, as a ratio of individual preferences cannot obtain under communism, as there is no free exchange of goods or services. Society like a great family will continue to organize its economic activity on the basis of a direct knowledge of sanctioned wants, available resources and alternative methods of utilising them.

To the extent to which a socialistic community provides for collective consumption, production being in any case collective, the problem of securing equimarginal satisfactions would be tackled institutionally, *e.g.*, without the interference of pricing, which is a concommitant of an exchange economy. The selection as between one method of producing a given supply and another will, in this context, have to be made in the same way as under communism. Technical estimates and comparisons will have to be made. Where the resources are not directly comparable either quantitatively or qualitatively, the test of efficiency will be supplied by the resulting total satisfaction yielded by all productive acts.

A factor spent more in one act is so much withdrawn from another. An additional satisfaction is pitted against a foregone satisfaction. If the total disposal of factors produces a sense of maximum satisfaction under all headings—a state of equi-marginal satisfactions—the purposes of economical production are served. To the extent to which a feeling of frustration emerges on account of an 'uneconomic' diversion of a given factor the same can be corrected by a fresh distribution of resources. Not by knowledge gathered through price, but by information of satisfactions directly known, the most economical method of producing collectively consumed goods can be developed in a socialistic economy.

Free Goods

In a socialistic economy all goods need not be collectively consumed. In fact, there will be a tendency to maintain on the unrestricted fist open to individual buyers quite a good number of articles or services. The division between collective and individual consumption will not necessarily follow the line dividing necessaries and luxuries. So far as demand is free prices will tend to conform to the well-known principles of monopoly value. In outlining the behaviour of value in this field the influence produced on prices by the currency policy of the state is kept out of account. Whether a socialistic state may have the same objectives and methods of currency management as a capitalistic economy, is a separate topic of discussion. In the present connection we assume that currency management is neutral as a force controlling price variations.

In a socialistic economy supply is at once joint and monopolistic. In so far as the supply is monopolistic, prices will tend to wipe out a large part of consumers' surplus. In so far as merely economic possibilities are concerned not only would consumers' surplus tend to dwindle, but its position as a joint supplier will strengthen the hands of the state in any economic discrimination that it may desire to pursue. Discrimination and hard bargaining may in fact be not indulged in, but this would depend on what social policy the state desires to follow. Prices in a socialistic economy are

liable to be very greatly influenced by the social policy of the state. Hence anybody interested in promoting the best economisation of the community's resources in a socialistic economy must assure himself that the controllers of social policy are not only wise but are also communally minded.

In a capitalistic economy a monopolist fixes prices with reference to the prospect of maximum profit. Profit in the crude sense of a private earning secured by manipulating supply will indeed be absent in a socialistic economy. It does not, however, follow that the state will itself not try to create as big a surplus for itself as possible, may be for quite laudable ends. These ends being given, all socialistic economy will be run in a way calculated to secure the utmost satisfaction of these ends with the minimum effort. Pricing in any particular market is likely to be influenced by its bearing on the maximum collective welfare.

The element of joint supply in a socialistic economy indicates another possible tendency. Prices of several articles, freely dealt in, will in a measure depend on the relative elasticities of demand for the same. Things for which the demand is comparatively inelastic will tend to have higher prices than others. The community, if it is interested in creating, by a process of indirect taxation, a surplus for its collective needs, may therefore find it advantageous to put up prices of articles with an inelastic demand, i.e., mostly of necessaries of life. The position would be analogous to the taxation of commodities in a capitalist state, specially to the case of a revenue monopoly. As more direct methods of meeting its collective needs are available to a socialistic state the practical extent of the revenue element in its pricing policy may be small. It, however, remains a possibility.

Supply in a socialist state being single-handed, it follows that the supplier, *qua* supplier, in this case the state, can control either quantity or price but not both. In either case, however, the essential function of value as a guide to economy would be satisfactorily served. Consumers would have a means to express their relative degrees of demands in the form of offers of purchase. The supplier will have to adjust himself to those offers. If prices are fixed by the

state in the first instance their bearing on the state of consumers' demands will be indicated by the condition of stocks. At the given prices demand might either coincide with or exceed or fall short of supply. Accordingly, there would be a case for maintaining, checking or accelerating production. As the fixing of prices will have to be done for fixed periods and for categories of goods, the spontaneity and perfection of the adjustments between supply and demand will be only partially realised.

If the state were only to anticipate demand and leave prices to be fixed by reference to the relative intensity of consumers' preferences, such a level of prices will tend to establish itself as will be suitable to the marketing of the whole available supply. Prices realised for the various articles may or may not coincide with the state's version of the prime and supplementary costs of production in each case. The only prime cost in a socialistic economy would be the payment of wages. Wages would no doubt tend to relative equality on account of a more regulated supply of labour, an equality of opportunities and possibly on account of a lack of a competitive demand for labour. But still relative efficiency will continue to be an important factor making for differences in wages.

Wages will be calculated and paid in some form of money, in which also prices will be expressed and realised. How is the state, however, to proceed in finding a money equivalent for its supplementary costs, which would include an allowance for the use of capital and for the general organization of the state? As for the latter an approximate calculation is possible on the basis of wages paid to administrative employees. But how are capital costs to be calculated and allowed for either in fixing prices in state stores or in comparing the realised prices with the outlay in production?

Capital Goods

By very definition, there is no free market for capital goods, hence for those there can be no market prices to help the controls in their calculations of costs. Short of a mere hit or miss—what Von Mises would less euphemistically call

irrational—allowance in money, based perhaps on technical calculations, two features are available for the guidance of the main control. Wages of labour being given as a freely determined price, it is always possible to work out the substitution rate of a capital good and a unit of labour. If it costs A to employ a unit of labour and it is a point of indifference to productive efficiency whether *X* labour or *Y* capital is employed the price equivalent for *Y* is the same as the wage of X. By its direct experience of the various methods of production the control can work out the comparative costs both physical and monetary. So long as at least one factor of prdouction, viz., labour has an exchange market there need be no insuperable difficulty in the way of working out even monetary costs of capital goods.

In another way also it is possible to work out by no means an unserviceable schedule of capital costs. The value of capital goods is derived from that of consumers' goods. If the prices of the latter are known, as they would be if the state experimented with differing quantities of supply, some indication of the relative importance of capital goods as compared with the price of labour that has gone into the production of that supply would be secured. In declaring their preferences for finished goods consumers would indirectly be declaring their preferences for the services of productive agents. Out of these last the pricing of labour services is an independent phenomenon. Hence the total cost of all capital services could be worked out as a check on calculations arrived at in detail by reference to the points of substitution with labour indicated above.

It will thus be seen that not only by the development of an irrational instinct, but also by the rational development of a technique of working out virtual money costs it is possible to regulate production by reference to demand, in so far as the demand is free. A necessary condition would, however, be the existence of a free labour market. If this last does not obtain the society would be for the most part communistic. Economy would be guided more by institutional controls and less by the indications of freely expressed demands of consumers. This, however, need not be true of every socialistic economy.

Economic Production

Inasmuch as a socialistic economy can by any or all of the means above indicated bring about the disposal of available means to produce the maximum satisfaction of private and collective needs the elementary problem of economical production would in a way be solved. But, it may be asked, what guarantee is there of this way proving the most economical way? Under a competitive economy the profit motive leads producers to experiment with more and more economical methods of production. The urge to profit is the urge to discovery and enterprise. With the abolition of free production, discovery and enterprise would both vanish. Production would tend to be stagnant and, therefore, less economical than what it would have been in a private economy.

This argument has only an indirect bearing on the problem of value in a socialistic economy. In so far as money costs of differing methods of capital utilisation can be worked out, as per methods discussed above, the institutional machinery to compare the costliness of different methods of production would not be lacking. In this regard a direct comparison of technical costs would also be not altogether impossible. If, however, valuation under a socialistic economy by its supremely monopolistic character were to discourage technical or organisational progress it would certainly be uneconomical in the long run.

There is, however, no reason to suppose that such a stagnant and toneless stage would be reached. For one thing even as a monopolist the state would be interested in reducing costs with a view to maximise its surplus. If the state organises research departments to keep a constant watch on the economy, to suggest and plan improvements, the tone of the economic system would no doubt be maintained on a high level. If it is felt that the element of competition adds to the spread and efficiency of productive reform, units of effective production and research may be placed in some type of competitive relationship with one another. Either by offering the inducement of high earnings or by other non-economical stimulii the process of technological and organi-

sational improvement may be maintained at a steady pace. From a purely theoretical standpoint there is no reason to fear that with the abolition of profit technical impovement would necessarily slow down.

The Ideal and the Real

As an idea, (not necessarily as an ideal), the formulation, expression and functioning of value would be institutionally possible under socialism. The best interests of consumption, distribution and production of wealth would be served by the process of pricing in a socialistic no less than in a capitalistic economy. This happy state of things is conceivable. Is it probable? Much would depend on the wisdom and public spirit of the controllers of national economy. The efficiency of administrative organisation and the intelligent cooperation of workers of all description would also be indispensable. Given an intelligent, progressive and patriotic people, the efficient working of a socialistic economy would be easily assured. Given these things, the just and efficient working of any economy, even of the existing one, would be a fair prospect. The expanding scope of collectivisation in the existing capitalist structure is an expression of this truth. Unless more is known of the practical success of the Russian economy it is not possible to say whether conditions necessary for the success of a socialistic economy obtain in that country. Whatever other faults one may find with socialism, it is not a tenable charge against it to say that 'economic' activity in our sense of the word—i.e., rational activity—would be impossible under socialism.

On one point a word in conclusion should be added. It is often claimed for socialism that under its dispensation social need and not effective demand will guide production. This will be true only for collective goods and that also under the supposition that the economic control is thoroughly disinterested. With regard to the freely (*i.e.*, without provision through a state department of expenditure) supplied goods the market demand would still be the demand backed by purchasing power. In the interest of efficiency and justice differences in earnings will have to be tolerated in a socialistic state. With the exception then of the socially

disbursed services which may perhaps cover a wider list of wants in a socialistic than in a capitalist state, the nature of demand and its influence on value remain unchanged under socialism.

SUMMARY

[Complete socialisation of economic life would make a society communistic. Collectivisation of the means of production would, however, suffice to make a community socialistic, as distinguished both from capitalistic and communistic societies. Communistic economy would be similar to family or clan economy. The scale would be immensely greater, but the economic principle would be the same. A communistic society would attain the purposes of economic life without the emergence of exchange value. To the extent to which a socialistic economy provides for collective consumption the problem of securing equimarginal satisfactions would be tackled without the interference of pricing, which is a concomitant of an exchange economy. A socialistic community may, however, provide for quite a considerable list of freely consumed goods. In this field prices will be regulated by the familiar laws of monopoly value. The social policy pursued by the socialistic state will be reflected in its behaviour as a monopolist supplier. The socialistic state may, as a supplier, control either price or supply, but not both. If it undertakes to fix prices the adjustment between demand and supply can be only imperfectly realised. If prices are left to be determined by demand an equilibrium price will tend to tstablish itself. In both cases it is necessary that the state should be in a position to ascertain its costs of production. Costs will be made up of wages and the price or compensation for capital goods. The former will be easily ascertained by reference to the actual rates of wages, which are as free in a socialistic economy as any prices are likely to be. For capital goods market prices are not available. Wages of labour being given, it is, however, possible to work out the substitution rate of a capital good. So long as at least one factor of production, *viz*., labour, has an exchange market there need be no insuperable difficulty in working out monetary costs of capital goods. A check on these calculations is supplied by deducting the wages of labour from the total price realised for the freely traded goods. A mechanism that would enable directors to work out monetary costs of alternative methods of production would also help in the selection of the most economical one.]

OUTPUT AND PRICE IN A SOCIALIST ECONOMY

BY

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Socialist Economy

In this paper, the socialist economy is considered to be that ideal condition of society in which every department of industry is in the hands of the State "working without friction and with enormous economy, and compelled to give to the public the full benefit of that economy."[1] Each individual is free to choose, subject to the limitations of his income, any or all of the commodities that the state produces for the consumers. Money would be necessary as a medium of exchange, to determine the ratios of equivalence between the various services and between various products, and to maintain the accounts of industrial activity. This system is akin to a state of monopoly, where every material means of production is in the hands of a single authority and further that this authority decides not to make use of its monopolistic power to restrict production so as to raise the price of its services artificially, but to work each of these means to the full extent it could be profitably worked,[2] for the benefit of the consumers.

Economic Welfare

The benefit to the consumers by the production and sale of a commodity can be measured by the consumers'

[1] Clark, *The Control of Trusts*, p. 14.

[2] *Vide* Marshall, *Principles of Economics*, V, ix, 5, p. 423, where the example of meteoric stones is taken to illustrate a similar state.

surplus appropriate to that production and when this is added to the profits of the monopoly, *i.e.*, the monopoly revenue, we get what Marshall called 'the total benefit'[3] which may be taken as the money measure of the Social Welfare of the producers and the consumers of a commodity. It can be easily perceived through the use of mathematical symbols that this total benefit corresponds to what may be called the consumers' benefit, which the consumers would aim at getting when the production of commodities is in their own hands. This benefit is simply the excess of the consumers' surplus over the actual cost of producing the commodity.[4]

Planning in Socialistic Economy, as in any other economy, consists in so adjusting the variables controlling the economy, to obtain maximum results with regard to the economic welfare of the community. Thus a production and a cost, which will make 'the total benefit' of the monopoly economy (or the 'Consumers' benefit' of the consumers' economy), would represent the output and value of a commodity produced under socialistic conditions.

Output

It can be perceived that under these conditions, the output will always be greater than that under monopoly where the production is controlled solely to the benefit of the Producer.[5] Whether this output is greater or smaller than the output under competitive conditions can easily be studied by the application of symbolic methods, which by now is familiar among all economists. If $f(x)$ represents

[3] *Vide Principles of Economics*, V, xiv, 7—p. 487.

[4] As early as 1844, Dupuit represented the General Welfare by the difference between the integral of the demand function and the integral between the same limits of the marginal cost function. Vide, Harold Hotelling Econometric 1938. Vol. 6. Page, 245.

[5] *Vide*, Marshall. V. xiv. 8. p. 489. The amount which the monopolist will offer for sale will be greater (and the price at which he will sell it will be less) if he is to any extent desirous to promote the interests of consumers than if his sole aim is to obtain the greatest possible monopoly revenue.

the demand function and $\varphi(x)$ represents the supply function the consumers' benefit is represented by

$$\int_0^x f(x)\,d - x\varphi(x)$$

This will be a maximum when

$$f(x) - x\varphi'(x) - \varphi(r) = 0$$
$$\text{or } f(x) - \varphi(x) = x\varphi'(x) \quad \ldots\ldots\ldots (6)$$

The solution of this equation gives the output for these conditions. Remembering that for stability of equilibrium $\varphi'(x) > f'(x)$ (*i.e.*, the supply curve cuts the demand curve always from below), we can easily see that:

(1) When $\varphi'(x)$ is positive, *i.e.*, when production obeys the law of decreasing returns, the output under these conditions is less than the output under competition.[6]

(2) When φ (x) is negative, *i.e.*, when production obeys the law of increasing returns, we have the output greater than that under competitive conditions.

(3) When production is under the law of constant cost, both the output under competitive conditions and under socialistic conditions tend to be equal.

The accompanying graphs depict the relative positions of the outputs under monopolistic, competitive, and socialistic states of production.

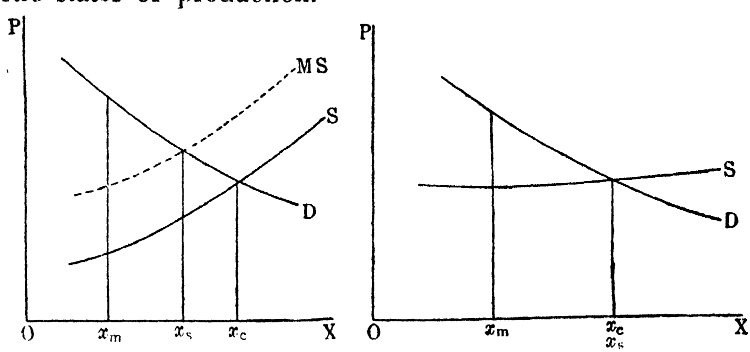

Fig. 1—Diminishing Returns. Fig. 2—Constant Returns.

[6] NOTE.—Competitive output is determined by the equation
$$f(x) - \varphi(x) = 0$$

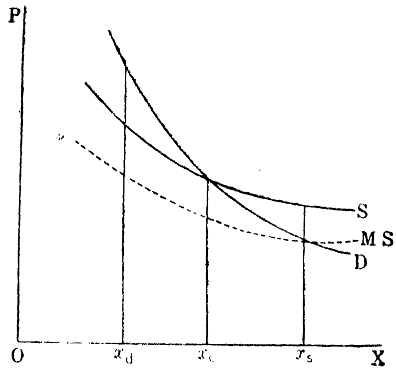

Fig. 3

D = demand curve — x_c = Competitive output.
S = Supply curve — x_s = Socialistic output.
MS = Marginal supply curve — x^m = Monopolistic output.

The Vertical heights represent the prices corresponding to the three states.

Price

The foregoing analysis also throws light on the price of the commodity under these conditions. Rewriting the equation (1) as

$$f(x) = \varphi(x) + x\varphi'(x)$$
$$= \frac{d}{dx}(x\varphi(x))$$

we find that the right hand side of the equation represents the marginal cost of the commodity. It might, therefore, be said that under the conditions defined above the commodities tend to be sold at their marginal costs. That is, in the case of commodities obeying the law of increasing returns, socialisation of competitive conditions will tend to increase the output and decrease the sale price, while in the case of commodities obeying the law of decreasing costs, a similar process results in the reduction of output though with a decrease in price.

It may be, therefore, said that in an economy consisting chiefly of agriculture in which the law of increasing costs plays an important part, free competition among

producers brings about better results, in the sense that a greater output is secured to the consumers and a greater rent to the producing class. But in an industrial economy with decreasing marginal costs, state control for the benefit of consumers secures greater output at cheaper prices.

Working in a different method and for a different purpose altogether, Harold Hotelling arrived at a similar result which he put as follows "Taking account of the inter-relations of commodities by methods not available in times of Dupuit and Marshall, that in a specified sense maximum welfare requires that the quantities of each good consumed or produced by an individual, shall be that corresponding to all sales being at marginal costs."[7] He noted that this proposition had 'revolutionary implications for example in electric-power and railway economics,' but failed to notice that his result could be extended to cover price formation in a socialistic economy.

From a theoretical point of view, it can be said that State operation and control tends to reduce the output in industries where the law of diminishing returns has set in. Von Hayek's statement that " what we should anticipate is that output where the use of the available resources was determined by some central authority, would be lower than if the price mechanism of a market operated freely under otherwise similar circumstances"[8] is only true of production obeying the law of diminishing returns. Even in this case, it is to the interest of the consumers to reduce output so that they might have the commodity at a lower price.

The practical application of this principle, however, bristles with many difficulties. The computation of the marginal cost is far less easier than the computation of average cost for any commodity. Besides, if commodities are to be offered for sale at their marginal costs, the financing of the initial or fixed costs is a big problem, particularly in such industries where the fixed costs form no mean part of the total costs. It is not the aim of this paper to throw

[7] *Vide* Harold Hotelling, The relation of prices to marginal costs in an optimum system. *Econometrica*, 1939, p. 151.

[8] F. A. Von Hayek. *Collectivist Economic Planning*, p. 204.

light on the ways by which these problems are or can be solved but it may be said in conclusion that "this will call for a study of demand and cost functions by economists, statisticians, and engineers and perhaps for a certain amount of large scale experimentation for the sake of gaining information about these functions . . . . Perhaps this is the way in which we shall ultimately get the material for a scientific economics."[9]

SUMMARY

["What we should anticipate is that output where the use of the available resources was determined by some central authority would be lower than if the price mechanism of a market operated freely under otherwise similar circumstances." (Von Hayek, *Collectivist Economic Planning*, p. 204.) This statement is examined in detail and is found to be not often true, particularly so in an industrial economy. Besides it is shown that in a socialistic economy, prices of commodities tend to equal their marginal costs. The mathematical method, that is used, cannot fail to show that its use offers a simpler and a more direct approach to the problems of theoretical economics.]

[9] Harold Hotelling, *Econometrica*, Vol. 6, p. 269, article on "The General Welfare in relation to problem of Taxation and of Railway and Utility rates."

VALUE IN A SOCIALISTIC STATE

BY

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I am one of those who believe that in the pure Science of Economics, there should be only one theory to determine Value, and that the theory should be independent of the particular Economic Organisation we have like Individualism, Socialism or Capitalism. Though by the word Value, in modern Economics, we mean only "value in exchange," no harm is done and much can be gained if we take into consideration the other meaning, 'Value in Use' also. The latter is subjective while the former is objective. There is no commodity in this world which is not useful to man. It is not correct to say strictly speaking that a commodity, say water, is more useful to man than, say, a diamond, unless we also give units and also the circumstances of the men under consideration. It is a subjective value. Value in exchange is different in origin. It arises because of the inability of man to produce all the commodities which he consumes for himself and also with equal skill. Let us now find out by what considerations these values are governed in a Socialistic State. We are not quite sure about the actual structure and the constitution of a Socialistic state and so it is difficult to say whether the problem of Value arises or not, though, it most be said, that the problem is inherent in nature and is always present under all circumstances.

We can imagine three conditions in a Socialistic State regarding the way in which distribution is made:—

(1) Every man will be given whatever he wants and in as large a quantity as he can consume. (This is an impossibility and need not seriously be considered.)

(2) Every man will get only what the state gives him (in fixed quality and quantity of commodities, *i.e.*, fixed ration cards

to be utilised every day of every week). Here therefore individual tastes are not considered as the State regulates consumption.

(3) Or the State will give every man a definite amount of "purchasing power" to enable the man to select definite amounts of commodities out of a big list depending upon personal tastes. A sort of optional ration cards).

Now in the first and the second cases above, "Value in use" or utility in the individual sense, *i.e.*, demand, does not play any great part except probably in fixing the total quantity to be produced and also the problem of 'Value in exchange' does not arise at all. Only in the third case does the problem of Exchange arise as when, for instance, a man wants, say, a fountain-pen instead of an umbrella or coffee instead of tea.

Here a small point must be cleared up. What exactly do we mean by "equal distribution" in Socialism? If by it we mean that every man will be given whatever he deserves or wants, then we will be creating an Utopia (because of the Scarce Means) and the problem of exchange though inherent in all cases does not arise at all. But if by it we mean that every man will be given 'equally' taking cost of production as the basis as in the third case above, then the problem of 'exchange value' must be considered.

We shall come to 'exchange value' in a few minutes. Let us examine the problem of demand first. As already stated, 'Utility' of a commodity is not an absolute and independent concept (unless we have every thing we want) but is an 'opportunity-utility' or an 'alternate utility' or a 'preference utility' and this is true always whether under Socialism or Capitalism. With unlimited wants and relatively Scarce Means, naturally we want to get the Maximum available Satisfaction; we must weigh the alternate utilities of all the commodities and also the utilities of all the alternate commodities and decide which to consume and hence which to produce. Under individualism (Capitalism) and also under Socialism as in the third case above, it is the business of the individual to find out his best choice. Under Socialism in general where the dictatorial system of production takes place, it is the business of the Dictator to find out the best way of utilising the Scarce Means. Under any

system, therefore, in this world, the importance of Demand remains what it is and we have to examine its implications a little more.

Value in use therefore is subjective and is a relative concept, relative to the circumstances. Thus we cannot say that water is more useful to man than a Diamond, unless we also know the situation of the man. Again when we say that a man prefers coffee to tea, *i.e.*, coffee is more useful to him than tea, it carries no meaning unless we know the quantity of each and the circumstances in which he can take them. What we must say is that he prefers a cup of coffee to a cup of tea under similar circumstances. So when coffee is available, he has no 'Demand' for tea, but as an alternative he might prefer to have tea, or even when coffee is available, he might prefer two cups of tea to a cup of coffee. Hence his 'Demand' for a commodity and also 'the elasticity of Demand' for the commodity are not absolute and independent concepts as Marshall imagines but are relative and dependent on the alternate choices. So we can establish now definitely that what Adam Smith called 'Value in Use' is nothing but, in this practical world, a subjective, personal 'Value in preference.' This 'preference value' depends on entirely individual tastes and estimates of the available commodities. Now according to the Demand and Supply Theory, Cost of Production also plays an equal, if not an important, part in the determination of value—cost of production consisting of prime and supplementary costs. In the long run at least, the total cost of production must be "covered" by the value in exchange.

There are two questions that now emerge:—

(1) Is there a cost of production in Socialism, and if so, what constitutes it?

(2) Should the cost of production be "covered" in Socialism?

Many people might say that there is no cost of production in Socialism. But to me it seems that there is cost of production, and, which is more important, that this is not in any way different from the cost of production under individualism (Capitalism), except in some minute details.

There is no space here to discuss these things in detail, but this can easily be said that it costs some labour and materials to produce even under Socialism. Provision must be made to give back to the Land something in the form of manure, to make up for the depreciation and wear and tear etc., and even allowance must be made for normal "profits." In other words, some of the produce must be set apart (in Agriculture to take an example) as seeds, some to be set apart for manuring the Land, some for wear and tear etc., and some for profits *i.e.*, for more investment than the previous year. When we say so what we mean is that those people who are engaged in these processes of collecting manure and manufacture of machines etc., should be maintained only out of this 'produce' from this Land. Some of the readers might wonder why 'profits' also should be taken. It must be so, if we understand the true significance of "profits." It is a pity that this side of "profits" is not thoroughly investigated by the Economists so far. By Profits we mean that excess over the mere cost of production. If we consume away everything we produce setting apart only as much as last year for reinvestment, then there is no Economic Progress at all. We must be able to set apart more and more every year both under Capitalism and Socialism, in order to produce more and hence allowance must be made for that which seems to be the only justification for 'Profits' in Economics. Under individualism, *i.e.*, Capitalism the original investment is taken from the Cost of Production while further investment is made only from Profits. That is why investment increases only when there are more Profits.

In this connection we must note what looks like a peculiarity of Socialism, that all 'Labour is fed' 'equally' and it is available always and the labourers are paid whether they work or not. That is to say that private charity of Capitalism is given up and Beggars will not be allowed to be idlers. It may also be said that all Land and Capital is owned by the State and hence nothing need be paid to induce them to produce. But as I have already stated, even here the State by distributing equally to all the people is doing the same thing as under Capitalism,—as we pay to Land etc., from the National Income. So we see that there is a

cost of production even under Socialism and that there is no difference at all between this and that under Capitalism except in Distribution. To some it may not look like cost of production *viz.*, making allowance for manure, wear and tear etc., but it will be clear if I tell you that but for these operations to be carried out necessarily consumption per head would have increased as these Labourers would have produced something else for more direct consumption.

We now come to the next question which is more important. Should the 'cost of production' be 'covered' under Socialism, as should be done in Capitalism—in other words, does the cost of production play any part in exchange value? Easily the answer is in the affirmative. It must be covered in the sense that the state must be able to produce more and more for next year thus raising the standard of life, *i.e.*, what is produced for next year should not be less than (Nay, it must be more than) what is consumed this year. It would be a 'social loss' if it is not done and it would reduce the present standard of life.

To understand the problem more clearly, we must know how production takes place under Socialism, (and then contrast it with that under Capitalism) and then find out how value in exchange is determined. Under Socialism there is a fixed amount of Labour which must necessarily work and must be equally paid, and also other fixed natural resources. Naturally the State will have to think well as to how best it could utilise all these factors so as to get the maximum produce which in consumption gives the maximum Satisfaction. We must remember here that what is produced is 'equally divided' among all the people, of course taking away, say, seed that would be required for further investment. Now there are two important problems for the State to decide. Here is an equally and inevitably paid Labour that can produce with the available Land and Capital some commodities at their best, while there are some commodities that are very essentially required for consumption which may not be produced by the factors of production with equal skill. The State has to decide in the first place what commodities are to be produced for consumption direct and what for further production (the latter being what I previously

called allowances for manure etc.,) and secondly, the quantity of each commodity to be produced (this is the fourth factor of production in economic organisation, and this is the only justification for these statesmen to take their share in the national income under Socialism) *i.e.*, to so organise production as to strike a balance between the present uses and the future and to get the maximum Satisfaction. All these problems arise because of Scarce Means and hence the difficulty of the State.

I cannot describe here, for want of space, how exactly the State solves all these problems, but suffice it to say that the State will naturally select those commodities which it thinks to be very essential for mankind to consume, *i.e.*, which would give the Maximum Satisfaction, and try to produce them with the available resources. If the State can, it can produce as much of those commodities as it wants and distribute them to the people equally, in which case there is no problem of exchange at all, though the problem of alternate utilities is always present. It must be remembered here that there is nothing like a problem of exchange between individuals as every person exchanges his produce with the State for a fixed return. But here when the question of 'equal distribution' comes, naturally there is the question of value also in the sense that when a certain number of persons would require alternate commodities for some commodities, and when the State is not able to supply all. Again the problem becomes prominent when a certain number of persons are required to produce a certain quantity, while double the number of persons are required to produce the same number or quantity of another commodity, and when we want to have 'equal distribution.'

Let us take an example. Throughout the discussion, it must be remembered well that the nation can consume only what it can produce. Thus,

$\frac{1}{2}$ the total population can produce X quantity of commodity A.
$\frac{1}{2}$ the total population can produce 2X quantity of commodity B.

Now there are 3X quantity of commodities A and B to be distributed among a population P. Then each person gets X/P of A and 2X/P of B under equal distribution. Now

suppose the whole nation wants only the commodity A, then all the productive activity is directed towards the production of A and (assuming production to be under the influence of constant returns) 2X commodities of A are now produced, each man getting 2X/P for his share, to consume. Or if the nation wants only B to be consumed, then 4X of B is produced and each man gets 4X/P of B. So the productive capacity of each man is either 2X/P of A or 4X/P of B. and that will also be the distribution. Suppose any man now wants to have more of A than of B then naturally one now is taken away from the production of B to that of A. with the result that now he produces only half of what he was previously producing in quantity. Therefore, this new man can now get as his share only half the quantity in B of what he was getting in A. Now we can equate and say that a man can get either A or B or both only in the ratio of A: 2B. It is bound to be so if it is going to be equal distribution, as the nation can consume only what it can produce. I have taken very simple examples and very simple fractions. In actual practice, the problem is more complicated, though the essental principle remains the same.

How is this Value in Exchange determined? It is determined by the relative or comparative capacities of the factors of production producing different quantities of various commodities, depending on relative skill, suitability of soil, etc. Here is a fundamental and universal principle of wide application whose truth and real significance has not been truly appreciated by the Economists, namely, the law of Comparative Advantage which explains why trade should take place not only between the nations but also among the individuals, and which determines the ratio of exchange of goods under Capitalism or Socialism, and under national or international trade.

This requires further explanation. We can understand it better by first knowing that in State production, production will not be haphazard but will be systematic and scientific and will have an excellent division into various industries, so that every man is put in that industry in which he has the greatest capacity to produce. Thus if a man can produce more, say of tea than of coffee, and another man

more of coffee than of tea, naturally they will be put into tea and coffee industries respectively. This is no doubt done after great experiment and deliberation, but it is the way it is done and naturally therefore, because a nation can consume only what it produces, the exchange value of commodities is determined by the Law of Comparative Advantage in Production. This is a universal and natural Law and it exists because of the differential skill of people to produce different commodities and its fundamental basis cannot be altered by the particular Economic Organisation we have, like Socialism or Capitalism.

Under Capitalism also the law operates. It is a mistaken idea to think that trade flows (in Capitalism) from man to man only because production has become complicated and man has ceased to be capable of self-sufficiency. It results in the absurd implication that there is no trade and that trade has no advantages if production is simple and Wants are few. It is wrong. Even in the primitive days as far as skill was not equal between people, trade was advantageous. To take an example in the primitive days, if a man could hunt 2 deer or 3 sheep, then, Adam Smith would say, that 2 deer will exchange for 3 sheep. Here he was wrong, wrong in estimating the skill of primitive people to be equal. The skill of all people cannot be equal. It is a natural feature. It is a pity he did not understand the implications of this differential skill of people though he was laying emphasis on the Division of Labour, etc.

Let us see how the exchange ratio ought to have been determined. Suppose, there is another man who could kill 2 sheep or 3 deer. Then for themselves the ratio of exchange is:

For the first man	2 deer = 3 sheep
For the second	3 deer = 2 sheep

Now when these two people meet together they begin to trade with each other for the same reasons why Nations want to trade with each other,—for mutual advantage—and both are happy about it. This is the true basis of trade and exchange—the Law of Comparative Advantage, and from this alone flow the advantages of the Division of Labour. We

want to improve the comparative skill of the worker and thus Production by specialising man in the production of that commodity for which he is best fitted.

As already stated, even under individualism (Capitalism), this is the basis of exchange but not an equation of Demand and Supply. When we buy a commodity in the market, from common experience, we do not know its cost of production to the seller and we never try to equate Demand and Supply. When we buy, what we really calculate is not what it costs to the producer to produce the commodity but what it costs us to make it for ourselves. In this complicated world it may not be possible to calculate all these things fully but if we take a simple case we can understand its significance.

I can stitch my own suits and also write books. By the former occupation I can earn Rs. 2 a day and by the latter Rs. 3 a day. Evidently, I am not stitching my own clothes but prefer writing books. When I want to stitch my clothes, I consider what it costs me to stitch my clothes for myself and find that costs me Rs. 3 and so I am prepared to pay my tailor up to Rs. 3 a day and it is advantageous to me. I do not consider what it costs the tailor to stitch the suit. It is his look-out and for him to find out if it is advantageous or not.

Let us see how the other man, the tailor, arrives at his figure. He has to buy with this money another commodity, say, he has to retail his house. He can do it for himself in one day or get it done by another for, say, Rs. 1-8-0. So he will find it now that by stitching suits he must be able to get at least Rs. 1½; otherwise, it is a loss to him. His cost of production is determined not absolutely but by the relative cost of producing those commodities which he wants.

I am afraid I have gone too far to explain this point. It must be said here that in actual practice sometimes the operation of the Law is not fully seen. It is because of a number of reasons similar to those that suppress the free operation of the Law of Comparative Advantage in International Trade, *e.g.*, in this case, individuals aiming at self-sufficiency, or restrictions of production by the Government, want of raw materials, etc.

To go back to the problem of value in the Socialistic State, we have seen so far that there are two kinds of Value, one determined subjectively by each individual by himself judging by the units of satisfaction given by each commodity. It is not an absolute value by itself but a preference value. Secondly, there is the exchange value determined by the comparative advantage in production. We have already seen that the 'value in preference,' *i.e.*, that value that determines Demand arises because of the Scarce Means of satisfying the great and unlimited Human Wants, and hence Man's necessity to choose from among the available commodities, those commodities that give him the Maximum Satisfaction. So Demand is determined by the 'preference utility' of the commodity but not by the absolute utility as Marshall suggests. While the basis of exchange is determined by the comparative cost of production not the absolute cost of production as Marshall suggests. The parts played by this 'value in preference' and 'relative cost of production' are entirely different from what Marshall suggests—they never try to equate themselves. Their parts are entirely different to play. Value in preference or Utility determines the commodity and the quantity required for consumption, while the comparative cost of production determines the basis of exchange, *i.e.*, the value in exchange.

The above situation is not changed even if we have ample means instead of Scarce Means at our disposal.

It is now my contention, as I stated in the beginning of my article, that this is the real theory of Value and that it is applicable to all times and for all kinds of Economic Organisation, like Socialism, Capitalism, etc. To make my point clear, let me examine the Demand and Supply theory of Dr. Marshall and point out its defects, in a few words. According to this theory, value is determined by the supply of and demand for the commodity, Demand being determined by the Marginal Utility and Supply by the cost of Production. Now let us understand its true implications. When a man demands a commodity, it is not a single one-sided affair, but it is a double transaction. When I demand coffee I am also supplying money in return (money being the representative of the commodity which I can produce

with the greatest adantage). Similarly, when another man supplies coffee he is also demanding another commodity for which he has preference utility which is, in money economy, represented by the money which I am offering in return. It is therefore an 'equilibrium' of double Demand and Supply, myself supplying the commodity which I can produce with the greatest advantage to myself, *i.e.*, with greater comparative skill, and the other man supplying his comparatively advantageous commodity.

I admit that in this world the situation is not so easy as that but ultimately that is the real meaning of all transactions. Thus when I demand coffee and am prepared to pay an anna for it, it means that a cup of coffee is worth at least one anna of not absolute utility but only comparative or preference utility, and when I am prepared to buy the second cup only for nine pies (Marshall's elasticity of Demand) it is not only that absolutely its Utility has fallen but relatively by the many alternate ways of spending that anna. Thus we find even under individualism, our Utility for a commodity (and its elasticity of Demand) is determined by circumstances relative to the situation, like the availability of their commodities, etc., but not by the absolute considerations the increase in the stock of only that commodity. Demand in this sense therefore is determined by the degree of preference for that commodity, and in its turn determines the quantity of any commodity to be produced. This explains why trade should take place together with the Law of Comparative Advantage. It is because man has preference utilities for certain commodities and because he is not able to produce them with equal skill and hence finds it more advantageous to trade. It is interesting to note here that even Marshall's 'Demand' never influences the price, but on the other hand, the quantity demanded and the marginal utility are determined and influenced by the 'price' which they were expected to influence so as to bring about 'equilibrium.'

In the same way, Marshall's 'Supply' side can be criticised. Cost of production is not absolute but is influenced by the alternate commodities that can be produced with the same factors of production. Again here also the

question of comparative utilities of commodities comes up and exchange takes place only when the commodity offered gives the man less utility than the commodity to be got in return.

To sum up, therefore,—

(1) There is only one true theory of Value to be applied at all times irrespective of our Economic Organisation.

(2) In the Supply and Demand theory of Dr. Marshall, it is really a double transaction between two people with comparative advantage of production in each one's commodity that he offers.

(3) In all cases value in use tells us why a commodity is demanded at all and determines the quantity demanded of each while the Law of Comparative Advantage in individual production determines the ratio of exchange, while both explain why trade takes place.

SAVING, INVESTMENT AND ENTERPRISE IN A SOCIALISTIC STATE

BY

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A socialistic state is not merely a particular type of economic system, but a particular type of society, actuated by certain ideals and purposes. It aims at a class-less society, a world free of exploitation, of unemployment and insecurity, of inequalities in wealth and incomes and consequent evils. Whether it attains these ends or not, it constantly aims towards their attainment, and economic organization is mainly a means for these ends. Its problems are therefore largely bound to be political and social rather than economic in character;[1] but its economic problems are relevant to the extent they control and influence the political measures and policies adopted.

Socialistic states may be of several types. For the purposes of this paper, we shall assume, in addition to the existence of the above fundamental purposes, the following criteria to be characteristic of a socialistic state:

(i) Collectivisive ownership of all means of production other than labour.

(ii) Absence of private individual initiative as the chief directive force in the economic system.

A socialistic state will differ from a capitalist state in practice only in degree. "No one has attempted or proposed or conceivably will seriously propose, anything approaching absolute economic individualism or absolute

[1] "The problem is, in the first place, political, not economic at all; and in the second place, it is a problem of what human beings really want and or of ideal values in relation to desires. The economist, as economist, has nothing to say about any of these questions"—F. H. Knight, in "Socialism—the Nature of the Problem" in *Ethics*, April, 1940.

socialization of production or every feature of economic life".[2] Most people agree that a Socialistic State can allow a large measure of freedom so far as consumption is concerned, and for the purpose allow people to have their own money incomes which are spent freely on consumers' goods. Thus there will be a relatively free market for consumers' goods, for which given consumers' incomes, prices will be determined by the interplay of supply and demand. Equilibrium prices could be fixed according to the process of trial and error, prices or supplies being adjusted from time to time by the producers.[3] On the assumption that economic conditions remain stationary for certain periods, this solution holds good and is satisfactory. Prof. Hayek points out several defects even regarding this possibility, particularly that adjustments of prices or supplies are bound to be slow and imperfect, due to constant necessity of reference to the central authority, and that prices cannot be fixed for each individual grade or item but only for large classes of goods. He points out also that prices as criteria of equilibrium between supply and demand cannot be available for goods produced to order or by tender—*e.g.*, ships, plant, etc. But here, in the present competitive system also, prices fixed are rather arbitrary and based on prevailing costs to a large extent; and if costs even of an 'accounting' nature are available, their prices can be determined.

The main problem arises with the pricing or the distribution of producers' goods in the most economical manner.

So far as labour is concerned, it is held by most socialists that choice of occupation should be free; diversion of labour, if necessary, should be carried out mainly by variations in wages or incomes. Labour should choose the lines of its maximum productivity, and paid accordingly (though these incomes may be modified later by taxation or differential pricing, and though non-economic measures may be used to draw labour if necessary into some lines).

[2] F. H. Knight, *op. cit.*

[3] F. Taylor and O. Lange, *On the Economic Theory of Socialism.*

Hence, the determination of wages and of labour-use will be essentially on lines similar to capitalism.

The main differences, arise with regard to the use of capital in production and the application of initiative in production. The question is, could these also be solved mainly on competitive lines, with the help of the criteria of interest rates and profits?

Prof. Lange and Dr. Dickinson have suggested that production should be entrusted in certain units to managers, who would be given a set of "factor—valuation tables" and directed to follow the following principles:—

(i) Each producer should choose that combination of factors which leads to minimum average cost.

(ii) Output should be taken up to the point where marginal cost (including interest and depreciation on capital) is equal to price as fixed by the trial and error method mentioned above.

(iii) Each industry as a whole should also observe the principle that marginal cost to the industry is equal to price.

If these principles are followed, and if the prices of factors of production given by the central authority are taken as granted for the time being, (*i.e.*, the 'parametric' function of prices is retained) then it is pointed out that the allocation of resources will be as determinate and as rational as in a competitive economy.

These proposals are criticised as unworkable by Hayek mainly on the ground that they are based on static assumptions, whereas the actual state of affairs in the world is one of constant change.[4] Costs are not objective facts, constant for a given period of time; they are everchanging. The principle that price should be equal to marginal cost cannot be put into force by *prices* being changed by the producers,

[4] F. G. Hayek:—"Socialist Calculation—The Competitive Solution," *Economica*, May, 1940.

because competitive price-changes are ruled out; the producers can only adjust quantities of factors of production, not their prices. Output cannot be expanded in the hope that it could be sold at a lower price; cheaper methods of production, to be adopted, must first of all get the sanction of the central authority which must theoretically be convinced of their practicability.

How are autonomous productive units, deciding all the important problems of investment and factor combination themselves, to take into account changes in technical conditions, or anticipate future changes in prices? If they anticipate such changes, are they to be given freedom to act accordingly? Supposing these anticipations prove to be wrong, who is to take the consequences? If managers of industrial units are to be taken to task for such losses, are they likely to take any steps involving risk or uncertainty? Then, where is the scope for innovation and change? Imperfection of foresight and uncertainty are inevitable in any system. Under capitalism, the margin of profit or loss goes to the entrepreneur who specializes the function of uncertainty bearing; the consequences of correct or mistaken anticipations are made to rest on the entrepreneur as the owner of enterprise. But a manager of production under a socialist system, who is only a salaried official, cannot be made responsible for these things. Prof. Knight says, "The socialistic state would have no objective or rational basis for fixing the remuneration of managers, the indeterminacy of their value being proportional to the degree in which they exercised initiative. . . . . Thus the contention of Prof. Von Mises and other opponents of socialism that there would be no objective rationale for the organization of production under socialism, while adequately refused by Prof. Lange (and others) for the routine operations of stationary economy, is after all essentially correct for the really serious problem of organization. This is the problem of anticipating substantial changes in the given conditions of economic life and in making necessary adaptations and for bringing about such changes."[5] The

[5] F. H. Knight, *Socialism, the Nature of the Problem.*

same difficulty is stressed by Hayek, Hoff and also Dr. Dobb.[6]

Thus the absence of a 'profit' criterion makes competition between autonomous enterprises unreal. While Hayek and others maintain that a rational allocation is impossible, Dobb draws the conclusion that all fundamental problems of enterprise, adaptation to change and initiation of development, have necessarily to be concentrated in the Central planning authority. The central authority will bear in mind prevailing consumers' preferences and their probable changes, which are themselves largely dependent on changes in productive activity; but these preferences themselves may have partly to adjust themselves to the developments due to the central authority's decisions.

This is particularly the case with problems concerning the use of capital, and saving and investment. Lange and Dickinson propose that autonomous industrial units, having their own profit and loss accounts should obtain capital from the central authority for both long and short term purposes and that a rate of interest must be charged which equates the supply and demand for capital. Here, there are two aspects of the problem involved: (1) How is existing capital supply to be distributed between different units? (2) How much of total resources are to be saved? Lange says that the second question has to be decided 'arbitrarily' by the Central authority, whereas the first problem would be decided by the mechanism of interest-changes. The rate of interest will form a constituent of marginal cost, the equation between which and price will determine the level of output. That there should be a rate of interest under Socialism also, and that it should play the part of regulating capital disposal was stressed by writers like Cassel.

These proposals are criticised by Hayek on the ground that the rate of interest, in the absence of a free market for capital, cannot have the same significance for regulating the use of capital. Capital is not lent, but given to managers who own no property but manage different branches of state-

[6] Dobb:—"Economic Law in a Socialist Economy" in *Political Economy and Capitalism.*

owned industry; the State will have to decide, therefore, not merely how much capital of different types it gives to different units but also whether certain types of capital used in some industries should be kept on these or transferred elsewhere. The managers themselves cannot be entrusted with investment decisions because they cannot anticipate price-changes or changes in the rate of interest, and profits or losses due to such anticipations cannot accrue to them. Hence, all decisions regarding the total amount of resources to be saved, and the amounts to be invested in each line will have to be taken by the Central authority itself. The rate of interest, can only play the minor role of being one of the several tests of efficiency or otherwise of a manager, or to control his demand for any augmentations of working capital.[7]

Dr. Dobb agrees with this, and further argues that even if it were possible to institute competition for capital and let autonomous units decide problems of investment, it is not desirable to do so. For, this will reproduce all the elements of uncertainty and mistaken anticipations with regard to investment that are inevitable in a competitive economy, and leads to the very same fluctuations which a socialist economy seeks to avoid by co-ordination of knowledge and decisions.[8] Thus, while Hayek and others plead for the restoration of perfect competition to solve the problems of a dynamic economy with regard to anticipations and initiative in production according to the profit criterion, Dobb argues that competition of any type should not be allowed in this very field, because autonomous decisions here are responsible for all the major fluctuations and mistakes of a competitive economy. Apart from the question of disequilibria due to lack of knowledge regarding the decisions and behaviour of others, Dobb argues convincingly that dependence on the rate of interest and changes in it to decide

[7] Thus, interest is charged only on short-term loans of working capital to producers by banks in Russia. Cf. Reddaway, The *Russian Financial System.*

[8] Dobb:—"A Note on Saving and Investment in a Socialist Economy," *Economic Journal,* December, 1939.

investment will cause the same cumulative processes of inflation and deflation which happen in the present system. He points out that under such a system, the feature of unemployed resources may again crop up because, the rule that marginal cost should equal price may necessitate not using some labour.

If for these reasons, all fundamental decisions regarding saving, investment and enterprise are to be taken by the central authority (of course, on the advice of the managers of productive units), what should be the criteria governing investment? He suggests that the authority would "direct each type of resources to that use where its productivity (at the margin) valued in terms of final output, was estimated to be a maximum." Other criteria like that of ensuing a gradual growth of capital and smooth change in the methods of production, so that the peculiar problems of over and under-development, premature obsolescence, sterilizing of inventions and new process to preserve capital-values, etc., which characterize modern capitalism could be avoided, would also have to be considered.

Hence, it is clear, that the process of valuation and therefore that of all important decisions regarding saving, enterprise and investment, are necessarily concentrated in the hands of the central authority; these do not admit of the competitive solution, and competition with regard to consumers' goods and the choice of occupation will have to be limited to a certain extent by these important decisions.

From this, are we to conclude with Hayek and others that 'rational' decisions are impossible in a Socialist economy? It depends on what is considered 'rational.' If rationality is identified with complete freedom of individual preferences and enterprise, it is clearly impossible under Socialism. It is equally impossible under any system other than ideally perfect competition.[9] If collective decisions are "rational" at all, as they are admitted to be with regard to problems like safeguarding the future interests of society from the defective telescopic faculty of individuals,

[9] Cf. Review of *Economic Calculation in Socialist Societies*, by T. J. B. Hoff in the *Economic Journal*, 1940.

assuring public health, hygiene and security, and constructing non-remunerative works, etc., there is no reason why collective decisions regarding large questions of saving, investment and enterprise should be totally " Irrational." It is obvious that on matters of detail and minor adjustments, a considerable degree of freedom must be allowed to the managers of production.

On the question whether such a system would mean an improvement over the present capitalist system again, we cannot be certain. Socialists claim that by co-ordination of knowledge, the problem of anticipating changes can be better solved by a socialist system, whereas critics like Prof. Hayek point out that knowledge, unspecialized by entrepreneurs and in the absence of spontaneous adjustment, will be useless and impossible to co-ordinate. As regards the elimination of economic fluctuations again, while socialists claim that only a socialist system can do so, Prof. Knight contends that it can be done provided proper policies were followed under capitalism also, while retaining individual freedom. Prof. Lindahl observes that both in the case of a society with free entrepreneurship and with centralized planning, "the task is to direct the productive resources of the community to production for present and future needs as to correspond to consumers' wishes. In both cases the problem must be solved on the basis of an anticipation of these wishes. But the practical solution is perhaps a little simpler in the socialist than in the capitalist state, since the distribution of productive resources is carried out by authoritative measures."[10]

The success of a Socialistic State in achieving its purposes will, in the last resort, depend on the problem of finding proper men to carry out its policies honestly and efficiently. Whether such men can be found, and made to work for social good rather than private profit, is the real problem of Socialism.

[10] E. Lindahl: *Studies in the Theory of Money and Capital*, "A Note on the Pricing Problem in a Community with Centralized Planning," p. 73.

SUMMARY

[A socialistic state exists for certain purposes, the achievement of which is mainly a political and social and only secondarily an economic problem. The characteristics of such a state are:—(1) Collective ownership of the means of production other than labour and (2) absence of individual enterprise and initiative in production.

The proposals of Messrs. Taylor, Lange and Dickinson for the solution of the value-problem in such a state by the method of trial and error, and by the preservation of competition in the consumer's goods market and in the production of goods also, are examined; the conclusion reached is that under relatively static conditions, a competitive market could be maintained for consumer's goods and to some extent for labour.

But so far as production is concerned, as pointed out by Hayek, Knight, and Dobb, it is explained how in the absence of a free market for producers' goods and the profit motive on which all entrepreneurial anticipations and activity are based, the problem of taking important decisions regarding saving, investment, and changing production is not capable of a solution. Hence, the present writer agrees with Dobb that both because of these difficulties and for preventing the reappearance of the evils of business fluctuations and unemployment which prevail in a competitive system, it is necessary and desirable in a socialistic state to vest all important decisions regarding saving, investment and enterprise in the Central Planning authority. The present writer also thinks that such a system need not be more "irrational" than the present system of extremely imperfect competition.]

DETERMINATION OF PRICES IN SOVIET RUSSIA

BY

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The function and the determination of prices as the purpose of the State in the Soviet system are different from those under capitalism. All activities are directed by the ideal of maximising social welfare. Even theoretical controversies have been oriented towards issues of practical policy. There is therefore no 'pure' theory of Economics in the U.S.S.R. The realisation of the "socio-economic optimum" is the ideal. "The criterion of capitalist profitability and automatic price-adjustment," writes Chossudowsky[1]—"is abandoned and the economic optimum is conceived as *the combination of a unified and purposive economic policy* (replacing the capitalist law of value) and the technical maximum. The criterion of this kind of optimum is the *pooled net material result* of the planned measures' total, adjusted and readjusted to suit the general purpose in view, it is thus not, or not necessarily, the simple adding up of 'bourgeois' commercial optima of individual enterprises in orthodox equilibrium." This general purpose setting largely determines the selection and the time pattern of the different varieties of planned investment, in production and consumption of goods. In fact, the Soviet concept of economic equilibrium is based as much on the environment in U.S.S.R. as on the Marxian analysis of the capitalist system. It denotes a particular form of planned purposeful social dynamics. "The characteristic feature of Soviet

[1] The Soviet concept of equilibrium, *Review of Economic Studies*, 1939.

economy at all stages," says a Soviet official publication,[2] "is the plan, and, moreover, the plan is a directive, a set work and not a mere forecast." Price is therefore, naturally regarded as "an instrument of planning accumulation and demand."[3]

The realisation of this purpose presupposes the concentration in the hands of the state of supreme authority over all branches of the national economy. The state owns and controls all the means of production and distribution. It decides with reference to social welfare the programme of production and the schemes of distribution and consumption. The needs of the citizens as envisaged by the central authority and not the effective demand for the goods. Freedom of private enterprise, free market and competitive prices are conspicuously absent. The state has a monopoly of trade. Wholesale trade is in the hands of state municipal and co-operative enterprises, each of which is responsible for buying the raw materials and selling the finished products, dealing under contract with the separate production units.[4] Retail trade is also organised by some dozen varieties of co-operative and state undertakings. Distribution of production goods among the industrial units is made by the authorities according to a plan. An effective control over the volume of purchasing power is exercised and private incomes are mainly determined by and derived from the state. The Soviet planning authority is, therefore, in a better position to fix prices in accordance with the plan and enforce them effectively. The significance of such planning prices, production, distribution and in fact, all aspects of social and economic life is stated[5] to have increased in direct proportion to the growth of state control.

[2] *Summary of the fulfilment of the First Five-year Plan.* (Moscow, 1932, p. 1).

[3] Ignator, "Price and Growth of Soviet Trade" in *Soviet Trade* May, 1935, p. 12, quoted in Chossudowsky, *op. cit.*, *p.* 139.

4 R. Burrows; *The Problem and Practice of Economic Planning*, 1937, p. 212.

[5] W. H. Chamberlain; "Planned Economy" in *Soviet Economics*, 1933, p. 1.

In the study of Soviet prices it is very necessary to bear in mind that the Soviet price structure is isolated from the rest of the world. Russia broke loose from the foreign currencies in 1926. Since then the paper Rouble is a unit existing by itself. Rouble prices do not stand any comparison with the prices prevailing outside Russia. An attempt to find out the relative purchasing power of the Rouble in terms of its gold equivalents in other currencies only shows that the purchasing power of the Rouble is very much less than that of its foreign gold equivalent. A comparison of Rouble prices with sterling prices in the case of a few standard commodities indicates that there is no uniformity in these variations either. The percentage of the difference varies from commodity to commodity.

The wholesale Rouble prices of three staple commodities, *viz.*, wheat, cotton and pig iron, are compared below with English prices for those commodities.[6]

	Wheat	Cotton	Pig iron
Average Rouble prices (fixed by decree of Government).	R. 12 16 (100 lb.); 1933 decree /	R. 1400 (ton); 60 Kop (lb)] 1935 decree	Cost of producing a ton R.60.56 1935 decree.
Theoretical gold parity of the rouble in terms of English money.	9.5 rouble per £		
Rouble prices converted into English money as per the rate given in column 2.	£. 1-5-7	Sh. 1-4 d per lb.	£. 6-7-6.
Actual prices prevailing in the English market.	5 Sh-6-Sh per 100 lbs.	6-8 d. per lb.	£. 3-8-0 the average sale price per ton

The sterling equivalents of current rouble retail prices and actual retail prices of similar articles in the English market are given in the following statement.[7]

[6] L. E. Hubbard: *Soviet Money and Finance*, pp. 132-133.

[7] *Ibid.*, p. 333, appendix.

Names of the articles	Moscow prices in terms of English money			Actual London prices		
	£	Sh.	d.	£	Sh.	d.
Wheat bread	0	0	7	0	0	2
Wheat flour	0	0	8	0	0	2
Rice	0	2	6	0	0	3
Oatmeal	0	0	6	0	0	3
Beef	0	2	10	0	1	2
Butter	0	6	4	0	1	1
Sugar	0	0	9	0	1	3
Potatoes	0	0	1½	0	0	1
Herrings	0	1	8	0	0	6

There are several price fixing authorities in Russia ranging from the Union Council of Labour and Defence to purely local authorities and Co-operative Unions with limited powers. The Union Council and the Special Committees for regulating the supply and distribution of retail consumption goods fix the price limits for representative standard goods. The local committees adjust the actual prices for the various descriptions of articles. Standard prices fixed by the central authority may not however be exceeded without permission from the Council of Labour and Defence.

The price mechanism is expected to perform two functions—primarily the preservation of the dynamic equilibrium between growing production and capital investment and secondarily, the maintenance of the equilibrium between demand and supply.[8] Whole influence on prices has not been altogether suppressed. While accepting the dictum that the price of a given commodity must correspond in its final analysis with its production in labour time, Soviet planning has attempted to relate such prices to the needs and capacities of the different classes of consumers with varying purchasing powers.

[8]Chossudowsky, *op. cit.*, p. 139.

As Chossudowsky observes[9]: "How far individual demands, as *expressed in the market*, are taken as long-term guidance for the direction of production is difficult to ascertain, but there is ample evidence that the market data are used for producing and the variety of goods in the secondary stages of production." It is unlikely that productive arrangements would be determined by consumers' demand in conformity with the ideal position of *laissez faire* Economics. While demand or "apprisals of individual utility" may be considered in deciding the variety of goods and their prices, the state plans consumption and prices in the interests of *social utility.*

The guiding principle is no doubt that of having prices assessed at cost plus, but there are substantial departures from it.[10] Goods may be sold below cost or at a price exceeding profits by more than the average profit rate. The former case is specially noticeable in the case of fuels and metals. While this has been inevitable in the initial stages of industrialisation, prices, wholesale and retail, are fixed so as to assure *in the aggregate*, a physical surplus over and above cost sufficient to supply the wherewithal for capital construction as provided for by the plan.[11]

The general nature of the pricing process in Soviet Russia can be understood by a study of the two types of prices, *viz.*, wholesale and retail. Agricultural prices and their formation have been as an independent unit. They govern the other price structures.

Agricultural Prices

The collective farms and individual peasants in Russia are bound to deliver to the state a definite quantity of produce at fixed prices. The price paid for such produce is very low compared with the price-level for industrial goods. This price may be called the compulsory delivery price

[9] *Op. cit.*, p. 144.

[10] Alexander Gourvitch, "The Problem of Prices and Valuation in the Soviet System," *American Economic Review*, 1936, Supplement, p. 268.

[11] *R.E.S.*, 1939, p. 139.

called 'Government price' by Nodel.[12] This is not uniform over the whole country. Irrespective of quality, higher prices are paid in some regions. Such arbitrary differences in these prices are said to be due to the policy of favouring certain regions for political and economic causes. The more fertile regions, for instance, are paid a lower price. These regions are to subsidise the less fertile regions whose produce is awarded a higher price. By this method they hope to equalise the earnings of the different regions in the country.

The compulsory delivery price paid for agricultural produce is the basic price in the Soviet system. Most of the surplus produce remaining with the collective and individual peasants is purchased either by the State organisations directly or individual industrial enterprises indirectly. In both these cases—centralised purchase or decentralised purchase—the prices paid are similar. They are fixed by the conventional price fixing bureaus. This price may be called the conventional price. The conventional prices should not exceed the limits laid down by the Central Government from time to time. These are invariably higher than the compulsory prices. The latter are usually twenty to forty per cent lower than the conventional prices.

A certain quantity of foodstuffs is sold in the open market to the city consumers directly. Market prices for agricultural produce prevail in the farm market in certain towns. Only those peasants who live within a certain radius of a town can make use of these markets. Direct sale by the peasant is insisted upon even in the case of these markets. The competition between the peasants and the state as distributors of agricultural produce is found to have resulted in a material reduction in the prices of such articles.

The principle underlying the determination of agricultural prices appears to be largely one of coercion. The basic price is arbitrary in character and based on the system of compulsory delivery of agricultural poduce. We must not forget that the Soviet Government has kept in view a minimum price. The minimum price that the peasant gets must enable him to purchase the essential manufactured

[12] *Supply and Trade in the U.S.S.R.*, 1934, p. 131,

goods, supplementary foodstuffs, pay his taxes and carry out the planned capital improvements on the farm. With a view to promote the incentive for agricultural improvement, the decree of 1936 introduced the payment of premium for voluntary sales of wheat by collective farms. The amount of the premium paid would increase with the quantity of the voluntary sales in excess of the compulsory quota due to Government. The interests of the peasant and the maintenance of the yield are given the necessary consideration. It would thus appear that an attempt has been made to evolve a policy of agricultural pricing such that the interests of agriculture as an industry are safeguarded with sacrificing the needs of the peasants.

Agricultural prices in any country must influence all other prices. Industrial prices, for example, are based upon the costs of manufacturing industrial products. They consist of the cost of the raw materials and the cost of labour. Under Soviet economic organisation other costs like interest rates and rent can be ignored. The cost of the raw material depends on the arbitrary prices fixed by government for agricultural products. Wages for the rank and file labourers are determined mainly with reference to the cost of food which is controlled by the prices paid for agricultural produce. The implications of agricultural pricing are thus far reaching in their significance.

Industrial and Trading Prices (Wholesale)

In the organisation of wholesale trade, observes Nodel,[13] "the principle that each commodity must pass through the minimum number of organisations is strictly enforced. The general rule is that each commodity, before reaching the shop, must be allowed to pass through no more than two commercial warehouses. These two are the maximum for commodities which require special sorting and cannot be sent directly to the retailer." Wholesale or industrial prices consist of three main components.[14]

[13] *Op. cit.* p. 39.

[14] *R.E.S.*, 1939, p. 143.

(1) Commercial cost of production which itself is made up of the average factory cost of production taking into account the planned norms of cost—reduction, of a social cost item and selling and administrative or cost of the economic organisations

(2) Profits and

(3) the turnover tax.

The production costs and the manufacturing profits of any enterprise are planned in advance. Profits are a planned percentage which is added to gross production costs for arriving at the fixed selling price. Fixed selling prices and planned profits (*i.e.*, the difference between production costs and fixed selling prices) do not in the least influence the volume of output or control the consumption of raw materials and labour in a given industrial enterprise. All that is fixed by the Plan and not controlled by the prices of the product or the profit of the enterprise.

The appropriation of the so called profits of a Soviet enterprise indicates very clearly the fundamental difference between soviet profits and profits of a free industrial enterprise. In Russia "profit or the difference between the selling price and the total production costs is divided into three parts. One part goes to the state, as a budgetary contribution, another part is paid to the Prombank as a contribution to the funds for general industrial capital development, while the third part remains at the disposition of the enterprise or the trust of which it is a unit." Such is the vital difference between the cost price structure of Soviet economy and a capitalist enterprise. It is also interesting to observe that the prices of these commodities are based on the PLANNED PRODUCTION COSTS which are arrived at by calculating the average actual cost for the previous year. The planned decrease, if any, for the current year is allowed as a deduction therefrom. Even such costs are fixed on the basis of the average costs for the whole of the individual industry. A Soviet enterprise which may not be able to produce the given commodity at the planned price does not automatically cease to do business. Weak businesses are kept alive by granting subsidies from Government. Industrial prices are accordingly described as accounting prices.

The prices of two different articles cannot be said to measure in any sense their relative value or utility. They represent perhaps the number of labour time units consumed in their manufacture. In spite of its defects the price structure has been very useful to the planning authorities in comparing the relative efficiency of the several industrial undertakings under their control. The State makes use of the price mechanism for controlling waste and extravagance.

Goods produced and priced by the manufacturing syndicates or trusts are passed on to the wholesale organisations of the retail system in Russia. To the price of the finished goods a turn over tax is added on. The tax ranges between 8 and 50% of the wholesale industrial price of the commodity. The tax is imposed on nearly all articles and varies enormously according as the policy of the Soviet Government is to encourage or restrict the consumption of the commodity under question.

Theoretical production costs and the principles of sumptuary legislation may thus be said to govern the structure of wholesale prices.

Retail Prices.

In the Soviet Union, retail trade is synonymous with the States' organisation for the distribution of consumption goods to the population. There are very few independent middlemen. The consumers' co-operative organisation and the state retail institutions controlled by the Commissariat for internal trade are the agencies entrusted with the control and management of retail trade.

A large proportion of the spending power of the public is made up of incomes received either in the shape of wages or purchase prices for primary commodities. These incomes are directly derived from the State. Soviet prices are not influenced by the price-level prevailing in the neighbouring countries of Europe. State control of consumption is therefore much easier in Russia. Still the large variety of the products, the wide extent of the country and the difficulties involved in controlling the desires of the individual citizen have complicated the problem of retail pricing.

Besides exercising a control over the distribution of goods, the price fixing authorities in Soviet Russia attempt to fix the total consumption and determine the relative consumption of the different classes of commodities. The retail price policy must also act as a means whereby the Government can control "the relation between national consumption and national saving."

The retail price is composed of the wholesale or delivery price and the retail price additions consisting of costs of distribution and budgetary additions. The relation between output and retail prices has become more simplified since 1935. A rise in retail prices cannot however act as an automatic stimulus to production. Demand can only react on prices and not on supply. To adjust the forces of demand to those of planned supply, two expedients have been employed by the Soviet authorities, *viz.*, rationed supplies and manipulated retail prices.

Rationed supplies characterised Soviet economic life till the opening months of 1935. The extensive use of rationing led to the establishment of the multiple price system. Several types of retail prices were in operation.[15] More than half a dozen types of retail prices have been mentioned by writers on Soviet economics. This is known as the "policy of differentiated prices on the basis of class

[15] *Soviet Money and Finance*, by L. E. Hubbard, pp. 139-140.

(1) Normal (ration) prices at which limited quantities of foods were sold to those possessing ration cards;

(2) Country prices at which the peasants could buy manufactured goods at village co-operative shops;

(3) Commerical prices at which unrestricted amounts of all consumption goods, except bread and cereals, were sold by the State commercial shops in the towns;

(4) Conventional prices at which the town consumers bought produce direct from the peasants;

(5) Open-market prices at which the town consumers bought produce direct from the peasants;

(6) Single bread price—the price midway between the rationed and commercial prices;

(7) Torgsin or 'gold' rouble prices which applied to articles relating to external trade.

discrimination."[16] Gradually the prices all round were advanced through increases in the turnover tax and the poorer section was very hard hit. Rationing led to waste and illegal profiteering. The defects of rationing were recognised fairly early by the Soviet leaders and by 1935 they returned to open market conditions in retail trade. On 1st January, 1935, bread and most cereal foods were first derationed. So in order to broaden the market, the single price system was adopted. " The single prices are fixed midway between the former commercial prices and the normal prices, i.e., those which prevailed in rationed and regulated distribution.[17] Though the abolition of rationing normal prices, *i.e.*, those which prevailed in rationed and commercial prices, the new market prices or the so called single retail prices vary considerably in the different parts of the country. The great extent of the country and the almost entire dependence of the population on local markets for the goods they need, has necessitated the division of the country into different price zones. Price unification is usually followed in these geographical zones and not for the country as a whole.

De-rationed retail prices are made up of two parts. The planned portion in it is to cover the fixed wholesale prices plus the costs of the retaining enterprise besides leaving a fixed percentage of profit. To this planned portion is added a certain amount for equalising demand and supply. As the sole supplier of consumption goods to the people, the Government would push up the planned price by adding this extra sum. This extra sum is necessarily arbitrary.

The addition to the planned retailed price resembles to some extent the profit derived by a monopolist. It is however necessary to bear in mind that the whole of this extra amount is paid direct to the budget. The so called monopoly profit is made available to the whole community. There is a fundamental difference between monopoly prices under capitalism and Soviet prices. The control over price in the case of a monopolist is exercised to secure the most

[16] *American Economic Review*, 1936, Supplement, p. 281.
[17] *Ibid.*

favourable prices for his monopoly goods. He may ration his supplies, fix arbitrary market prices or pursue a policy of discriminating pricing—the policies pursued in Soviet Russia. Whether the monopolist fixes prices or the quantity, his aim is to secure for his goods a market price higher than the competitive equilibrium price. It must yield him the higher profit. Soviet prices on the other hand are influenced by entirely different considerations. The needs and capacities of the consumers with different levels of purchasing power and the needs of planned production are the primary considerations in the determination of Soviet prices. Social welfare and monopoly profit are entirely different considerations.

Conclusion

The success of planning prices in the U. S. S. R. cannot be accurately known, though the general impression is that yet much remains to be done, Alexander Gourvitch observed:[18] "The system of conventionally low prices in transactions between socialised enterprises, prices for basic metal primarily, has at no time worked smoothly and has been constantly giving rise to difficulties, which have had to be met by emergency devices."

"As far as agricultural price policies are concerned" adds the same authority,[19] "the greatest administrative success achieved in the way of checking the growth of money cost of industrialisation has been the virtual stabilisation of agricultural prices since 1928 in the face of an enormous rise of prices of manufactures." Russian experience of nationalised trading is stated to have been not too encouraging.[20] On the other hand W. Nodel, a leading Soviet expert, considers[21] that great advantages have been realised by the consumers by planned trade. The elimination of the private trader and the improved organisation of co-operative and

[18] *Op. cit.* p. 282.

[19] *Ibid.*, 6. 276.

[20] Burrows, *op. cit.*, p. 212.

[21] *Supply and Trade in the U.S.S.R.*, Ch. III

Soviet trade have reduced the cost of trade and eliminated altogether the anarchical character of capitalist trade." It is alleged by others[22] that the Soviet are guided by political motives in fixing price levels for the price of those goods over which the state has a monopoly and whose distribution and consumption are completely regulated.

Whatever the truth, we must bear in mind two important facts, *viz.*, the purpose and ideal of the Soviet and the short period of the experimentation with planning prices. In the Soviet system price has a different meaning and is the result of a set of circumstances different from those of a capitalistic system. The Russian trusts and syndicates are in their outward form created on the models of a capitalistic system. At the same time they are dominated by a communist economic conception which dose not prevail in the rest of the world. On their controlled markets they charge different prices for the same products according to the consumers' needs and capacity, and the producers' hardship and needs.

Under conditions of free competition a far reaching 'automatism' regulates production and market conditions. In Soviet pricing an attempt is made to replace the effects of 'mechanical market selection' by the decisions of a well qualified central planning authority.

The price mechanism cannot determine the production of commodities in Soviet Russia; it is however helpful in directing the modes of life of the producers and the consumers. In the words of Barbara Wootton " . . . the Soviet planned economy has rendered the price mechanism entirely useless in certain spheres and has practically dispensed with it in others. . . . it has apparently retained that mechanism as the means of giving effect to a certain proportion of the decisions that all economic systems have to make particularly as an instrument for regulating the actions of people, as distinct from the disposal of things . . . But this mechanism is always employed with difference so that even where the plan apparently follows its readings, the results obtained

[22] Pietro Sessa; Ch. on "Social Problem" in *Soviet Economics* op. cit, p. 286.

may be quite different from those which would be realised under an unplanned economy."

SUMMARY

[Price determination in Soviet Russia is merely an instrument for realising the social ideal of socio-economic optimum of welfare. Economic equilibrium has a different significance. To achieve this purpose, the supreme authority controls all production, distribution and even consumption. Apart from this completely different purpose of price in social economy, the social price structure is isolated from the rest of the world and therefore has been little influenced by outside movements as is evident by comparing the English and Soviet prices of staples.

Market demands of individuals guide but not determine either quantity or prices. The basic principle of pricing is "cost plus", though there are substantial departures from it, *e.g.*, in fuels and metals. This general nature of the pricing process is illustrated in the paper by a detailed analysis of agricultural and industrial prices, wholesale and retail. The basis of the compulsory delivery prices, the conventional price and the market price is discussed. The ingredients of "Price" *viz.*, cost, profits and the turnover tax are explained and their significance is pointed out. While costs are not always covered by price, profits have a different significance in the U.S.S.R. Theoretical production costs and the principles of sumptuary legislation largely govern the structure of wholesale prices. The paper also discusses retail price in their components of wholesale prices, costs of distribution and budgetary additions, and the structure of rationed and derationed prices.

This review of the pricing process prevailing in Russia forces the conclusion that while planning of prices has not so far been completely either successful or beneficial, the period of experimentation has really been too short for a conclusive opinion regarding such planning.]

ALLOCATION OF RESOURCES IN A SOCIALIST ECONOMY

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Introduction—The Problem Stated

In the economic sphere, human conduct is determined solely by the fact that productive resources are scarce relatively to the desired ends so that a selective distribution of them over alternative uses is always necessary. The fundamental problem, therefore, for every community—whether Capitalist or Socialist is to achieve a rational allocation of

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the limited resources available for the satisfaction of the almost unlimited number of wants. Every society must have a scientific method of whât and how much to produce, of choosing between alternatives and of achieving its end with the greatest possible economy of productive resources. In other words, every society must aim at an ideal or rational allocation of its resources.

The method of the Capitalist society is the system of production for profit and exchange in a free competitive market. As a result of competition for profit, a competitive economy tends to bring about a rational allocation of its resources automatically. Not only will the business men be forced to economise their resources and thereby minimise their costs but also to make the selling price of their products cover their costs.

This tendency towards an ideal allocation of productive resources is brought about only under conditions of perfect competitive equilibrium. In practice, however, due to the existence of monopoly among producers and inequality of incomes among consumers, allocation of resources under capitalism is far from perfect. There is a great deal of waste and inefficiency. To get rid of the waste and remove the inefficiency, the blind forces of competition that govern allocation in Capitalist societies must be replaced by a system of Central Socialist Planning. Contrasted with a Capitalist society, productive resources, in a Socialist society are owned by the state authority and operated by a Central Planning Authority, not with a view to profit, but for the direct service of those whom the authority represents. But

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a Socialist economy socialises production only as contrasted with communism which socialises both production and con sumption. There is not only freedom of choice in consumption but also freedom of choice in occupation. Preferences of consumers as expressed in their demand prices (which are themselves based on money incomes assured to each citizen by the State) are still retained as the guiding criteria of production and ultimately of the proper allocation of resources.

The problem is: can resources be put to work in such a society, so that most will be made of them? that is, can resources be economised? In more technical language, is an ideal allocation of resources as that under competitive equilibrium possible in a Socialist economy? In fact, this problem of a rational allocation of resources is the central problem of Socialist economics.

Professor Von Mises, a leading opponent of Socialism, holds that a rational allocation of resources is impossible in a Socialist state on the ground that public ownership of the productive resources abolishes the market for them; without such a market, there can be no prices for them; and without prices, which indicate the relative importance of the factors of production, economic calculation or economic accounting is out of the question. But Oskar Lange, a Polish economist has shown that if prices are viewed not in the narrow sense of the word as exhange ratios on a market or the money for which a commodity or service can be obtained, but in the broad sense of "terms on which alternatives are offered," there is no difficulty for Socialism. For the absence of a market does not prevent the setting up of accounting prices or provincial valuations for tho purpose of allocating resources.

But Professor Mises argues that the accounting prices may be quite arbitrary and not as economically significant as they are in a capitalist economy. However, Barone, an Italian economist had already proved as early as 1908 that in principle the accounting prices of a Socialist economy are economically as significant as the market prices of a competitive economy. By using a series of simultaneous equations, Barone was the first to show that a Socialist economy

could make a rational allocation of resources in substantially the same way as a capitalist economy.

A second line of attack has been taken up by Professor Hayek and Robbins of London. They admit that a rational allocation of resources is theoretically possible in a Socialist state but deny that it can be worked out in practice. They point out that in order to determine prices, the Central Planning Authority in a Socialist state must have "complete lists of the different quantities of all commodities which would be bought at any possible combination of prices of the different commodities that might be available." They argue further that the Central Planning Authority would have to solve thousands, even millions of simultaneous equations before economic decisions could be taken; and they point out that there is no means known at present by which they can be solved in a lifetime.

This argument has been effectively met by Professors Taylor and Lange of the United States and Dr. Dickinson and Mr. Dobb of England. They have shown how a rational allocation of resources in a Socialist economy could be carried out by a method of trial and error in practically the same way as in a competitive one.

Ideal Allocation under Competitive Equilibrium

It is necessary at the outset to make clear the concept of an "Ideal" allocation of resources. An allocation of resources will be ideal only if it secures maximum aggregate satisfaction with a minimum use of such resources. Economy in the use of productive resources for the attainment of the highest total satisfaction is the very *sine qua non* of an ideal allocation of resources. Such an ideal allocation is achieved only under conditons of perfect equilibrium in a fully free competitive market.

Now to reach a position of equilibrium, two conditions must be satisfied. In the first place, producers must aim at securing maximum profits by minimising costs and by making their selling price equal to the cost of producing the commodities. This may be called the *subjective* condition and is actually brought about by combining the factors of production in such proportions as to equalise the marginal

productivity of the amount of each factor which can be purchased for a unit of money. Secondly, the demand for each commodity must be equal to its supply. This may be called the *objective* condition and is carried out in practice by a method of trial and error.

The method of trial and error in a competitive economy is based on what may be called the *Parametric Function of Prices;* that is, on that fact that although the prices are a resultant of the behaviour of all individuals on the market, each individual separately regards the actual market prices as given data to which he has to adjust himself. Each individual tries to exploit the market situation confronting him which he cannot control. Market prices are thus parameters determining the behaviour of the individuals.

Each individual entrepreneur starts on the basis of actual prices prevailing on the market. With these *historically given* market prices, he fulfills the subjective equilibrium condition by trying to minimise costs and to make the selling price of the product equal to the cost of producing it. By these means, he tries to obtain maximum profits. At the prevailing market prices, a certain quantity of each commodity is demanded and a certain quantity is supplied. The objective condition of equilibrium now comes into play. If the quantity demanded and the quantity supplied happen to be equal, a state of equilibrium is reached and ideal allocation is attained. If, however, the quantities demanded and the quantities supplied diverge, the competition of buyers and sellers will alter the prices. Prices of those commodities, the demand for which exceeds the supply rise, while the prices of those commodities where the reverse is the case, fall. As a result there is established a new set of prices which serves as a basis for the individual's striving to maximise their profits from the ownership of their productive resources. A new set of quantities demanded and supplied are established. If demand and supply are not equal for each commodity, prices change again and there is another set of prices which again serve as a basis, for the individual rearranging of choices; and thus there is a new set of quantities demanded and supplied. And so the process goes on

until finally equilibrium is reached and the quantity demanded and the quantity supplied are equal to each other.

It is only under conditions of perfect competition that such a state of equilibrium is reached and an ideal allocation of resources achieved. But in actual life, conditions of perfect competition are never realised; and so under capitalism a large part of the productive resources are misdirected and wasted. For instance, in modern conditions, monopoly power is widely exercised in a number of industries. In order to secure high prices, the monopolist very often restricts output, which implies that he restricts the quantity of resources at work in his industry below the quantity that would be at work there, if resources were ideally allocated. Again, under capitalism with a regime of imperfect competition, a large amount of resources is devoted to one or another sort of advertisement. Much of the expenditure on competitive advertisement, whose ultimate purpose is to switch about people's tastes in a purely irrational way is sheer waste—an allocation of productive resources that has no net yield. Further, certain industries entail costs outside themselves or confer benefits for which they do not receive payment; or in technical language, marginal private and marginal social costs of production are not everywhere identical. Finally, in the present economic system, there is a gross inequality of incomes, which has resulted in a great waste of productive resources as they are more diverted to the satisfaction of the whims of the rich and not in meeting the vital needs of the poor.

These types of waste would not be present under perfect competition; but in capitalism as it is actually constituted they play a large part. They entail a substantial diversion of productive resources from the ideal allocation. We have now to examine whether a Socialist economy can bring about a rational allocation of resources better than a Capitalist one.

Socialist Allocation of Resources

The greatest merit of a perfectly free competitive system is that under it, it is possible to achieve an ideal allocation of resources. Individual entrepreneurs tend to attain

by the method of trial and error, an equilibrium position at which there is not only a minimisation of costs but also an equilisation of the selling price of the product to the cost of producing it. Further at the point of equilibrium, the amount supplied will be exactly equal to the amount demanded, so that there is no waste of productive resources and no demand remains unsatisfied. A socialist economy must also attain such an equilibrium position, if it should economise its productive resources.

There are two fundamental differences between a Socialist and a Capitalist economy, which are significant so far as the problem of allocation of resources is concerned. First, the productive resources in a Socialist economy are owned by the State and directed by a Central Planning Authority, though there is freedom of choice of consumption and freedom of choice of occupation. There is therefore no genuine market in a Socialist economy for capital goods and productive resources other than labour and no market prices for them. Secondly, the decisions of the managers of production in Socialist economy are not guided, as in a capitalist one, by the aim of maximising profit. Instead the Central Planning aims at satisfying consumer's preferences in the best way possible; these preferences being based on the total income assured to them by the state.

Now, the crux of the problem of allocation lies in the determination of the relative or effective importance of the factors of production. Their relative importance is derived from the importances of the large number of commodities which emerge from all the productive process. The question is, how in a concrete way is the relative importance of each factor determined? This can be done in a Socialist economy by *imputing* to each factor a provisional valuation in terms of money, on the basis of which, correct accounting prices can be obtained by applying the method of trial and error in exactly the same way as that in which prices are actually determined in a competitive market.

We have seen that under capitalism, the method of trial and error is based on what is called the *Parametric Function of Prices*. A price structure as objective and as economically significant as the one under capitalism can be

obtained in a Socialist economy, if the Parametric Function of Prices is retained. Under a Socialist economy, the Parametric Function of Prices would be imposed as an accounting rule and all decisions and all accounting of individual plant managers would be made as if prices were independent of the decisions taken. For purpose of accounting, plant managers would treat prices as constant, just as they are treated by businessmen under the competitive system. Thus the Central Planning Authority in a Socialist economy can also base its method of trial and error on a Parametric use of prices.

The Central Planning Authority will start with a set of *historically given* prices actually prevailing in the market much in the same way as capitalist entrepreneurs do. It need not depend upon guess work for the initial prices. All decisions of the managers of production who direct the productive resources under public ownership and also all decisions of individuals as consumers and as suppliers of labour are made on the basis of these prices. While making their decisions, they must always observe two rules; first, minimising of costs and second, making their selling prices equal to their cost of producing the commodities: the subjective condition of equilibrium will thus be satisfied.

As a result of their decisions, the quantity demanded and supplied of each commodity is determined. If the quantity demanded of a commodity is not equal to the quantity supplied, the price of that commodity has to be charged. It has to be raised if demand exceeds supply and lowered if supply exceeds demand. Thus the Central Planning Authority fixes a new set of prices which serves as a basis for new decisions and which results in a new set of quantities demanded and supplied. Through this process of trial and error a point will be reached when the quantity supplied will be equal to the quantity demanded. The objective condition of equilibrium is also satisfied and a rational allocation of resources achieved.

It is to be noted that there would be no necessity for the Central Planning Authority to have before it data as to relative productivities in every imaginable combination of possible situations; nor is it necessary for it to solve millions

of equations, as Professors Hayek and Robbins expect. In practice, the question would always at any one time arise in the form of a movement from a pre-existing situation; and the relative productivity of changes in the neighbourhood of the initial situation is all that would be required and probably all that in any system could be known. The Planning Authority need not know the productivity of every conceivable combination of resources more than the private enterpreneur needs to know it today in order to decide whether to shift resources from one use to another.

Further, no knowledge of higher mathematics is needed for establishing the right accounting prices which serve as Parameters to persons who solve equations daily. Nor is there any need for a knowledge of the demand and supply functions. The right prices are simply found out by watching quantities demanded and quantities supplied and by raising the price of a commodity or service whenever there is an excess of demand over supply and lowering it when the reverse is the case, until by trial and error the price is found at which the demand and supply are equated.

Thus the process of determining the equilibrium price and on the basis of it arriving at a rational allocation of resources is substantially the same as that in a competitive one. The Central Planning Authority performs the functions of the market. It establishes the same essential conditions, the Parametric use of prices in accounting; and the two essential rules, *viz.*, minimisation of costs and equality of marginal cost and selling price of the product—for combining the factors of production, for choosing the scale of output of a plant, and for determining the output of an industry. The Central Planning Authority enables a Socialist economy to ascertain the relative importance of the factors of production and to make a rational allocation of resources.

Critique of Socialist Allocation

If the same procedure for achieving a rational allocation of resources is to be adopted by a Socialist economy as is done by a Competitive one, what is the advantage to be derived from changing over to Socialism? A Socialist eco-

nomy is superior to a Capitalist one in a number of important respects. In the first place it can reach the right equilibrium prices, *i.e.*, prices which balanced supply and demand, by a much shorter succession of trials than a competitive market actually does. It can do this simply because the Central Planning Authority will have a much greater knowledge of what is happening in the economic system as a whole than any private entrepreneur can possibly have under capitalism. As Dickinson says, the system works as it were, in a glass house in which all the details of the mechanism and its working can be followed.

Possessed with a greater knowledge of the economic system as a whole, the Central Planning Authority will be in a better position than a Capitalist society, to take into account all the alternatives sacrificed and realised in production. The most important alternatives, like life, security, and health of the workers are, under private enterprise, largely sacrificed without being accounted for. A Socialist economy, on the other hand, would be better able to put all the alternatives into its economic accounting. Thus it would evaluate all the services rendered by production and take into account all the alternatives sacrificed. By doing so, it would avoid much of the social waste connected with private enterprise. As Professor Pigou has pointed out, much of this waste can, to a certain extent, be removed by a proper system of bounties, taxes and legislation within the framework of the capitalist system itself; but a Socialist economy can do it more thoroughly than the Capitalist economy.

Of greater significance is the fact that because a Socialist economy, can take into account all the alternatives, it can control the fluctuations of the trade cycle much better than the present Capitalist economy. Severe depressions and acute unemployment would not be likely to occur. It is true that grave mistakes such as misdirection of investments and production would undoubtedly be made in a Socialist economy also. But such mistakes need not lead to shrinkage of output and unemployment of factors, spreading over the whole economic system. The great advantage of a Socialist economy is that mistakes can be localised. Overproduction in one part of the economic organisation may

not be allowed to spread and become a general one. Losses in one part of the economy need not be corrected, as is done under capitalism, by measures that create in other parts still further losses by the secondary effect of a cumulative shrinkage of demand and of unemployment of the factors of production.

The second important advantage of a Socialist economy over a Capitalist one is in the distribution of incomes. A Socialist economy can so distribute incomes as to maximise social welfare. But under Capitalism incomes are distributed according to the ownership of the means of production. These are privately owned by the few, while the masses own nothing but their labour power. Under such conditions, demand price or what consumers are willing and able to pay for commodities which they want, does not reflect the relative urgency of the needs of different persons. On the other hand, it reflects the incomes of the many who go without necessities and the few who enjoy luxuries. Thus under the Capitalist system, the allocation of resources as determined by the demand price of consumers is far from attaining maximum social welfare.

If incomes are to be distributed so as to maximise social welfare, two conditions must be satisfied. First, the same demand price offered by different consumers must represent an equal urgency of need. Second, the services of labour must be distributed among the different occupations so that the value of the marginal product of labour must be equal to the disutility involved in pursuing these occupations. In other words, the product which is added by applying the last unit of labour that will pay for itself must be equal to the discomfort or exertion necessary to produce it. There is no doubt that a Socialist economy can satisfy these two conditions much better than Capitalism can ever do. A Socialist economy could distribute incomes among individuals in such a way as to make each one have the same marginal utility from his income. It could strike the right average in estimating the relative urgency of the needs of dfferent persons, making only a few errors. But the distribution of income in the Capitalist economy introduces a constant error—a class error in favour of the rich.

Again, another advantage of the Socialist economy is that a rational allocation of resources is made under it more directly than under the present capitalist system. In an individual economy, a market for factors of production serves to generalise data in the form of a price for them; and through the medium of this price procures the allocation of resources automatically between industries. But this is the only instrument which exists in such an economy for achieving an allocation of resources. That in a socialist economy, it should be thought necessary for the managers of various plants, having ascertained the necessary data about productivities to use these data to play an elaborate game of bidding for the factors of production on a market, instead of transmitting the information direct to the plant managers is, according to Dobb, a "Heath Robinson" kind of suggestion. Moreover, it has the positive disadvantage, that in playing such a game, the managers of socialist enterprises would be as much in blinkers as to the concurrent decisions being made elsewhere as are private entrepreneurs in the capitalist economy and thus would be subject to a similar degree of competitive uncertainty.

Further, the evil of monopoly, over the present Capitalist allocation of resources can be largely overcome by extending the range of public ownership and public operation to industries in which they have not yet been introduced. Similarly, it is preferable to extend Socialist ownership and control to industries in which the wastes of competitive advertisement are very great.

Against these advantages of a Socialist economy, there are a few disadvantages. In the first place, there is an arbitrary rate of capital accumulation under Socialist economy. It is obvious that a Socialist economy must set aside capital for maintenance and new investments so that the standard of living may be increased. For such an accumulation of capital, a price must be set; that is, interest must be charged for the use of capital. But the rate of interest under a Socialist economy cannot be determined by consumers' preferences as it is under Capitalism; for most of the capital is owned and controlled by the state. That the rate of interest will be determined not by consumers deciding how much to

save but arbitrarily by the Central Planning Authority may be considered to lead to a reduction of social welfare.

But it is doubtful whether, from the economic standpoint, a rate of interest reflecting consumers' preferences is superior to one set arbitrarily by the Central Planning Authority. In this connection, we must distinguish between the short period and the long. In the short period, under both Capitalism and Socialism, the amount of capital is regarded as constant, and the rate of interest is determined simply by the condition that the demand for capital is equal to the amount available. Here, the Central Planning Authority will begin as before, with a rate based on historically given rates and adjust these rates by a method of trial and error until the correct rate was attained. Such a procedure would be substantially the same as that at present followed under the Capitalist economy.

The chief difference however between a Capitalist and a Socialist economy occurs in respect to the long period. In the present economic system, saving is only partly determined by considerations of utility; the rate of saving is affected much more by the distribution of incomes, which is irrational from the economic point of view. Further in a capitalist economy, saving of capital may not be followed by an appropriate rate of investment; and poverty instead of increased prosperity may result from saving. Thus, under capitalism too, the actual rate of capital accumulation is divorced from the preferences of the people. But the rate of capital accumulation determined corporately in a Socialist state may from the economic point of view prove to be more rational than the actual rate of saving under capitalism. However, it must be admitted that a Socialist economy suffers from an arbitrary rate of capital accumulation and of interest in the long run.

Again, under capitalism it may be possible, in principle, to set right maladjustments due to divergencies between private and social costs by an appropriately devised system of bounties and duties. But the practical difficulty of determining the right rates of bounty and of duty is extraordinarily difficult. The data necessary for a scientific decision are almost wholly wanting. As a matter of fact, no

attempt has ever been made in a capitalist regime to use bounties and duties for bringing about adjustments between marginal private and marginal social costs. A Central Planning Authority also is not in a more favourable situation than the Capiatlist economy to obtain data required for these calculations. For, what is needed in order to bring about an adjustment is not will, but knowledge. The relevant knowledge is of a sort that we do not at present possess and the gaining of it in course of time is no more likely under the one system than under the other.

Further, a Socialist state would not be a self-contained one; but it would stand as one among a number of other states, some perhaps Socialist and others Capitalist. Some of the consumption goods that the Socialist State required would presumably be obtained by way of exchange with products made in other states. Here is a further source of complication—complication made all the greater if conditions of production and of demand in these other states are liable, as they might well be, to large and frequent variations.

In view of all these difficulties, the practical task of a Central Planning Authority seeking to achieve an ideal allocation of productive resources would be a formidable one in which it is not possible to be entirely successful. An approach to full success depends mostly upon the will and capacity of the controlling authority and of the agencies through which it works. But except in a world of superhuman beings, grave and fundamental mistakes are sure to be made. The bureaucratic management of economic life is in the last resort the real danger of Socialism.

No doubt an ideal allocation of productive resources can in principle be made in a Socialist economy. But the data and the instruments required for putting the principles into practice are lacking at present. It is, therefore, not possible to overcome the shortcomings of the present Capitalist system by the mere substitution of a Socialist machinery in its place.

In the meanwhile, the economist cannot afford to stand still, but must come out of his cloister, and even with the help of the imperfect materials at his disposal, must make

an attempt to approach the ideal; for he has to discharge a double responsibility—that of an expert and that of a man of the world. In this attempt, it is better for him to follow Professor Pigou's advice that is, "to follow the path of gradualness—to mould and to transform and not violently to uproot." But as Professor Pigou adds "Gradualness implies action and is not a polite name for standing still.' If however " the economist does not come down from his cloister to walk in the market-place, the world and his cloister," as pointed out by Dr. Dobb "may soon start tumbling about his ears."

PRICE-LEVEL OF TOBACCO IN THE GUNTUR AREA

By

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Tobacco is the most democratic luxury, is a rich man's solace and a poor man's comfort. The tobacco industry has suffered practically no set-back during the recent depression period. Over three-fourths of the world's area under tobacco is concentrated in America and Asia. Normally U. S. A. stands first among the tobacco producing countries of the world, excluding China, with India as a close second. The tobacco crop holds an important place in Indian agriculture and it is the leading cash crop of the cultivators in many parts of the country. Further expansion of the production and trade will depend on maintaining and improving the quality of Indian tobacco. Better prices can be secured for growers by effecting economies in distribution, establishing and regulating open markets and by adopting uniform standard quality grades. At present, the share of the consumers' or manufacturers' price obtained by the grower is small, being only 10 annas in the rupee in the case of internal trade, and in respect of tobacco leaf exported to United Kingdom, the grower gets only about 6 annas in the rupee paid by the buyers for stripped leaf.

In British India the average area under tobacco (from 1929 to 1936) was 1,051 thousand acres or 78 per cent of all-India total. The provinces of Bengal, Bihar, Bombay and Madras account for four-fifths of the total area. The share of the Madras Presidency comes to 19·5 per cent, of all-India acreage, while half of this or 1,20,000 acres is confined to the Guntur area alone. The area under Virginia tobacco in the Guntur District has been increasing. Nizam's Dominions, Deccan States, Cooch Behar and Baroda States contribute 75 per cent to the tobacco production in the

Indian States which devote about 300 thousand acres for tobacco cultivation. In Burma, tobacco is raised on 102 thousand acres. Considering the figures for the ten years, 1925—35, India produced on the average 514 thousand tons of tobacco annually of the value of Rs. 21·9 crores, while Burma produced 45 thousand tons valued at Rs. 1·5 crores. Thus it will be seen that tobacco acreage is concentrated in certain areas and that there are small fluctuations in the area under this crop.

Of all the agricultural crops the tobacco crop is one of the most susceptible to changes in soil, climatic conditions and cultural operations. The periods of sowing and harvesting vary from province to province. Even different fields in the same locality require different tillage operations. The farmer knows that the quality he offers for sale and the price it fetches depend largely on the method of harvest and curing. Other factors determining the price-level are sorting, bulking, re-conditioning, bundling and packing. From the view-point of the grower, he can thus obtain 9 annas or more per lb. of flue-cured cigarette tobacco of the first grade as against 2 annas per lb. of the fifth grade. Certain characteristics—colour, texture, size of leaf, strength, flavour, burning capacity—are required to qualify the product for commercial sale and consumption. The yield per acre varies in accordance with the type grown and the irrigation supplied. In the Guntur area the yield per acre of raw Virginia cigarette leaf is about 750 lbs., and of country cigarette tobacco is 1200 lbs., while the British India average per acre is 960 lbs. (including the stalk of the plant). At present tobacco occupies 4 out of every 1,000 acres of the sown area, but this acreage is expanding by 2 per cent per annum. The bulk of tobacco-growers are small farmers who sell their crop immediately after harvest at the rates ruling then. More than three-fifths of the tobacco crop finds its way to markets from February to July. In the Guntur area about 90 per cent of the crop is sold by growers by the beginning of April to exporters and manufacturers, while the balance is exported to foreign countries on their own account. There are no marked seasonal variations in the flow of market supplies.

The total average annual imports into India and Burma of all types of unmanufactured and manufactured tobacco are only 4·8 million lbs. valued at Rs. 95·3 lakhs of which the quantity of unmanufactured product is 3·5 million lbs. The share of U.S.A. in these is about 77 per cent and is composed wholly of Virginia type. In addition, 10,567 thousand lbs. of tobacco, raw and its products, worth Rs. 14½ lakhs enter India every year through the land-routes and ports of States. The average annual declared values of imports of unmanufactured tobacco from 1930—37 was Rs. 1-4-11 per lb. which was higher than the price in the previous period. The rise in values was attributed to the prices of leaf in U.S.A. and the changes in the quality of the imported product. This shows the importance of producing cigarette leaf of good quality in India. Consequently, in the Guntur District, high grade flue-cured Virginia is being cultivated and is displacing American leaf. Apart from this tendency, even the existing duties on foreign imports do not appear to bring in the desired result.

As regards exports of all types of tobacco from India, Burma and Indian States, by sea and land-frontier routes, their quantity approaches 36,721 thousand lbs., composed almost entirely of unmanufactured variety; United Kingdom, Aden and Japan are large buyers. It has to be mentioned that the declared value of export per 1 lb. of unmanufactured tobacco during the decade, 1925—35, for Madras, was practically constant at Re. 0-5-9, while for other ports it differed and fluctuated markedly depending on the types exported. The *per capita* net available supply in India is estimated at 2·9 lbs. The general trend of tobacco consumption in India is upward, particularly in the case of cigarettes.

Though our country competes with U.S.A. for the first place among the tobacco producing countries of the world, her production is almost entirely used for home consumption. India accounts for only 3 per cent, while U.S.A. monopolises 46 per cent of the world's exports. The direction of these is mainly towards Europe, England being the largest single purchaser of the unmanufactured tobacco entering the international trade.

There is a large range of quality in this product. The quality varies even in the same type and season from district to district and still from one field to another, particularly in the indigenous varieties. Almost all sales of this agricultural commodity take place in villages at the curing yards. Some growers sell on contract to the Indian Leaf Tobacco Development Company, Ltd., of Guntur which enters into bonded contracts with growers and curers by which the latter are required to deliver their graded tobacco to the Company. This Tobacco Development Concern with its net-work of organisation and control assembles the produce, makes advances to curers, distributes seedings to the growers. Though this system has led to stability in prices, it is to be criticised regarding the price abroad and the proportion that accrues to the grower whose prices range from 1½ as. to 7 as. for tobacco leaf which is sold in foreign markets at prices ranging between 4 as. to Re. 1-2-0 per lb. Buying merchants tour from village to village fixing prices by negotiation. About half a dozen large export firms compete for purchasing tobacco. Not more than 10 per cent of the produce is sold by growers in properly established markets. Assembling is an important stage in marketing since at that point the grower converts his crop into cash. When considering the operations of demand and supply in governing price in the tobacco market, we must aggregate the expenses up to one and the same point in regard to every transaction; and take the demand price at that point. Generally speaking, the customs of each particular branch of trade or industry indicate the most convenient point for this purpose. In spite of the great fluctuations in the price of Virginia flue-cured cigarette tobacco depending on different factors, the tendency is towards a distinct rise in price-level. The contracted prices have been nine, seven, five and three annas per pound for 1st, 2nd, 3rd and 4th grades respectively, while for scraps and rejections the price is one anna. As regards other transactions, variations are common. The prices are high soon after harvest, as also from January to May, by the end of which period most stock would be sold off. Japan being the largest single buyer of Guntur country tobacco, its demand determines largely the price. The

average price per candy of 500 lbs. is Rs. 45. It is estimated that not more than 1 per cent of the total Virginia crop in the Guntur area is sold in the green condition. This green uncured leaf is sometimes sold on acre basis and the prices range from Rs. 60 to Rs. 200 per acre depending on the condition of the crop and the quality of the leaf produced. Prices vary from one merchant to another on the same day and for the same type and quality of tobacco too. Bargaining strength, capacity to hold over produce and extent of competition among buyers determine prices. It is worthwhile to note that the buyer considers the quality offered for sale, the quantity produced, the amount of stock at distributing centres and the probable demand, in giving the offer. One peculiarity in the Guntur area is that tobacco is marketed by growers to small dealers and it passes through four or five hands before it reaches the exporter who grades the stuff to make it acceptable by the consuming factories. Enforcement of standards and regulation of transactions in definite localities go a long way in removing some of these anomalies. The object of the Government in enacting the Madras Commercial Crops Market Act, 1933, and of the amended Act of this year is to provide for the better regulation of the buying and selling and for that purpose to establish markets. In exercise of the powers conferred by the Act, the Guntur and Bezwada Tobacco Market Committee was started during last year to regulate and improve tobacco-trading in this notified area and to maintain prices in the market against inconvenient competition. The Committee has adopted eight grades for flue-cured Virginia and three grades for sun-cured Virginia tobaccos. It supplies to the Government weekly statements of prices for four items —Virginia flue-cured, Virginia rack-cured, Natu, Gulla,— of tobacco in the Guntur market. A study of the prices of different varieties of tobacco shows large variation in prices. Generally, the range for flue-cured Virginia is as follows:

1st Grade—Rs. 280 to Rs. 340 per candy of 500 lbs.
2nd Grade—Rs. 150 to Rs. 200 ,, ,,
3rd Grade—Rs. 100 to Rs. 150 ,, ,,
6, 7 and 8 Grades—Rs. 40 to Rs. 60 per candy of 500 lbs.

If the Committee can succeed in securing the co-operation of the cultivators, buyers and exporters, it can conduct auctions of the product, and apart from the seasonal or foreign demand, prices may be better regulated. By this means growers can compare prices offered for their lots; and the buyers can not only get quick supplies but will help the producer to market the right tobacco. The monthly wholesale prices of tobacco, Virginia and Country, published by the local Government do not influence the dealers, as they prefer to rely on their own efforts to obtain information on prices, stocks, etc. For the benefit of the buyers and sellers of tobacco a scheme of market intelligence about area, production, types and also a dependable system of price quotations is to be devised. If grading, standardization and quotation of prices is systematically done, and provision made for safe storage of the products, banks will be in a position to make advances according to the value of the stuff. The Guntur Market Committee has standardized weights, methods of weighing and market charges and is attempting to enforce licencing of middlemen and buyers operating in the market.

Another point to be noted about the Guntur area is that stocks of tobacco do not accumulate. Generally speaking, the production of tobacco is seasonal while the demand is spread over the year. So it is to be stored until required for consumption. In the United Kingdom for example, the manufacturers hold large stocks in the bonded warehouses to get the leaf aged for manufacture, and to counteract the effect of fluctuations in prices and quality of crop in the producing countries. This procedure naturally influences the prices.

Handling and transplantation charges also determine the price. Tobacco does not permit bulk handling as it deteriorates by exposure and frequent change of hands. Taking the case of the export trade of Guntur, canal transport is made use of up to the port of Cocanada, as freights payable are four times cheaper than those for rail-transport. The items of distribution-costs vary in the different areas. When the producers sell direct to manufacturers, the costs of distribution are small, consisting of local market charges,

handling and carting expenses. In the Guntur area, for instance, the average market charges payable by seller in village per Rs. 100 worth of Virginia and Natu tobacco are Rs. 3-8-6 and Rs. 4-12-6 respectively; for sales in markets, the charges are Rs. 4-0-4 and Rs. 5-7-0. The same charges are to be paid by the buyer. This item naturally affects the price of the article. But when tobacco is exported, the grower's share of the consumer's price is still smaller. When the flue-cured leaf is exported by a merchant at Guntur, the grower for his leaf, on an average gets 42 per cent of the price realised in the United Kingdom markets, while the exporter makes a margin of 16 per cent; the balance represents other charges. In the case of Country tobacco exported to United Kingdom, the grower's share of consumers' price is still smaller; he gets 31 per cent, whereas the exporter earns a margin of 26 per cent. In regard to exports of the same stuff to Japan, the percentages are 38 and 33 for the grower and exporter. A word has to be said about the internal distribution of unmanufactured tobacco. Here the proportion of the consumer's price that goes to the producer depends on factors like the quality, the distance over which it is transported and the number of times it changes hands before reaching destination. The grower realises about Rs. 14-15-8 for standard maund of Guntur Country tobacco sold to the manufacturer at Sukkur, whereas the consumer's price goes to Rs. 20 limit. Wholesalers and commission agents form an important link in the chain of distribution, and they are responsible for assembling and distributing about four-fifths of the total annunal prduction of tobacco in our country. The cost of preparing for the market exercises a dominant influence on value; the principle of the doctrine of value implies the effect exerted on cost and therefore on price.

In passing it may be stated that the Imperial Tobacco Company handles nearly 75 per cent of the total trade of cigarettes and imported manufacturers. The total value of tobacco trade approaches Rs. 46 crores mark. There is complete absence of periodical variation in the prices of these products; even year-to-year fluctuations are rare, specially in the retail prices. No relation between the prices of un-

manufactured tobacco and those of tobacco products can be established.

Improvement in price returns means so much addition to the cash income of the producers of tobacco. The conclusions are: (1) General trend of prices shows that good quality tobaccos are rising in price and that inferior varieties are decreasing in value. (2) Imports of superior quality manufactured products remain high with constant price-level. (3) Wider markets can be secured for high quality tobacco. (4) Quality at every turn constitutes an important factor in the marketing of this agricultural product.

Since tobacco is one of the leading cash crops of the Indian cultivators, sincere efforts are to be made to improve and expand its production while the consumers' interests are to be safeguarded. Tobacco is susceptible of great variations in prices which can be stabilised owing to the fact that the requirements of manufacturers of high grade products are more steady and regular. Naturally if the growers press their supplies into market they earn reduced prices. Level of quality can be raised by direction and organisation. Regulated markets as at Guntur should undertake news-service about supplies and prices and tackle problems peculiar to their localities. Here attention is to be directed to the production of high grade flue-cured Virginia cigarette leaf to meet the demands of the important export market of United Kingdom. This implies control of quality, distribution of pure seed and seedlings, licencing of flue-curing barns and re-drying plants, fostering of organised voluntary efforts on the part of co-operative and trade associations, encouragement to better harvesting and curing methods, popularising of standard grades and the like. By a reduction in the costs of distribution, the cultivators will be able to get improved price returns.

Problems relating to price movements in an agricultural country like ours are important in the understanding of our economic position. A study about the rise and fall even of primary commodities will be immensely useful. It gives a clue to gauge the extent to which wealth production and its distribution are altered, and to understand the manner in which various classes like the landholders, rural folk, in-

dustrial workers and persons with fixed incomes will be affected. It is well-known that the causes for the world-wide slump in prices after 1929 were monetary as well as non-monetary. In our country the collapse of prices in food stuffs and agricultural raw materials was pronounced. The purchasing power of the agriculturist was not only reduced, but the incidence of his obligations has become more onerous. But our perspective will be limited when we study the question of the price-level of a commodity like that of tobacco. Factors like variations in the quantities supplied, extension of credit, increase in the volume of circulating media are not likely to influence the price-position of this commodity to such a degree as to affect markedly the interests of all concerned. No doubt in a war-year like the present foreign markets are uninviting with the consequence that stocks are undisposed of in this area and the merchants are apprehensive of losses. One relieving note is that the growers already realised fair prices for their stuff. Much depends on how events shape themselves in future.

SUMMARY

[Tobacco is the most democratic luxury. The tobacco industry has suffered practically no setback during the recent depression period. Tobacco crop holds an important place in Indian agriculture and is the leading cash crop of the cultivators in many parts of the country. Better prices can be secured for growers, and the share of the consumers' or manufacturers' price at present obtained by the grower can be increased by effecting economies in distribution, establishing and regulating open markets and by adopting uniform standard quality grades.

Tobacco is concentrated in certain areas and there are small fluctuations in the area under this crop, though cultivation of Virginia leaf is being extended in some parts like Guntur area. India produces on the average 515 thousand tons of tobacco annually of the value of Rs. 22 crores.

Of all the agricultural crops the tobacco crop is one of the most susceptible to changes in soil, climatic conditions and cultural operations. The prices of the types of tobacco depend on the method of harvest, curing, sorting, bundling etc. In the Guntur area about 90 per cent. of the crop is sold by growers by April to exporters and manufacturers and there are no marked seasonal variations in the flow of market supplies.

The total average annual imports into British India of all kinds of tobacco are about 4·8 million lbs. of which the quantity of un-

manufactured product is 3·5 million lbs. valued at Rs. 95 lakhs; the share of U.S.A. in these is 77 per cent. composed mostly of Virginia. In addition, through land routes and ports of States, tobacco worth Rs. 14½ lakhs enters our country. The average annual declared values of imports of unmanufactured tobacco was Re. 1-4-11 per lb. which was high due to the rise in prices in U.S.A. Hence arises the importance of cultivating good quality leaf in India. Guntur area is forging ahead in this matter. Exports amounting to 36,720 thousand lbs., mostly unmanufactured stuff are made to United Kingdom, Aden and Japan. The declared value of export per 1 lb. for Madras was practically constant at Re. 0-5-9, while for other ports fluctuations were marked depending on the types exported. India accounts for 3 per cent., while U.S.A. for 46 per cent. of the world's exports. England is our largest purchaser.

There is a large range of quality in this product. In this area almost all sales take place in villages at the curing yards. Some growers sell on contract to the I.L.T.D. Co. at Guntur. This system though it led to stability in prices to some extent is to be criticised regarding the price abroad and the small proportion accruing to the grower. Buying merchants and exporters, fix prices by negotiation or by competition. Operations of demand and supply, bargaining strength, capacity to hold over produce govern prices. In spite of the variations in prices, the tendency is towards a rise in their level. In exercise of the powers conferred by the Madras Commercial Crops Markets Acts, the Guntur and Bezwada Tobacco Market Committee started recently is trying to regulate and improve tobacco-trade and to maintain prices of the different grades fixed by it. But the range in prices is marked. The growers, buyers and exporters will be benefited by a scheme of market intelligence, auctions, dependable price-quotations, standardized weights and licencing of middlemen. By better storage, parties can get credit. Handling, transportation and distribution charges also determine price of tobacco. Level of quality can be raised by direction and organisation, while consumers' interests are also to be safeguarded.

General trend of prices shows that superior kinds of tobacco are rising in price and that inferior varieties are decreasing in value. Imports of good quality manufactured products remain high with constant price-level. Problems relating to price movements in an agricultural country like ours are important in understanding our economic position. They give a clue to find out the extent to which wealth production and its distribution are affected. But in the case of a commodity like that of tobacco factors like variations in the quantities supplied, extension of credit, increase in the volume of circulating media are not likely to influence its price-position to such a degree as to affect markedly the interests of all concerned.]

THE TREND OF AGRICULTURAL PRICES IN MYSORE DURING THE DECENNIUM 1928—1937

By

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In recent years, India, in common with the rest of the world, has been recovering from the most intense economic depression ever recorded. The falling prices has had acute repercussions on the economic life of the people. The prices of agricultural commodities fell to a greater extent than those of industries and manufactures, and hence the particular importance of a study of agricultural prices in India of this period. (Since 1929 in the U.S.A. agricultural prices fell by 60% whereas prices of industries and manufactures by 24 per cent). Unfortunately, the fall in prices is not due to any increase in the quantity of production. There is general agreement that it has been the result of other various complex factors. Important and far-reaching changes in the geographical and technical structure of industry and trade; equally important social developments —such as a rising standard of living, together with lessened flexibility of adjustment, political difficulties arising from reparation and war-debt payments and tariff wars; monetary arrangements connected with the post-war currency stabilisation and the working of the new gold standard after it was restored; international capital movements, security speculation and exchange difficulties—all have entered into the background of the price-fall. The exact degree to which each of these various factors have operated to precipitate the depression has been a subject of lively controversy. It is certain, however, that the fall in prices has put a great

strain upon the life of the agricultural population particularly.

The object of this paper is to study the actual trend in the movements of prices of agricultural commodities in Mysore for the decennium 1928—37, and investigating its effects on Agricultural production, trade in those commodities, the value of land and the standard of life and the general economic position of the agriculturists of Mysore.

The wholesale prices of Agricultural commodities in the Bangalore Market have been taken as the basis for study. Bangalore city being the central and the most important market in the Mysore State, these prices may be accepted as typical. The price variations in other important trade centres of the State are necessarily reflected in the quotations of the Bangalore market. Local differences in certain places, if any, may only be small and may be due to the cost of transport. Further, Bangalore has the advantage of being the head quarters of the Chamber of Commerce which has maintained an authoritative and continuous record of the weekly prices of various commodities from as early a time as 1915. The Department of Industries and Commerce has also a similar record.

Thirty commodities comprising both food products and raw materials have been taken into account. These are classified into four groups for purposes of special study and clear understanding. They are: (1) Grains and pulses, (2) Oil seeds, (3) Special malnad products, and (4) Miscellaneous agricultural products.

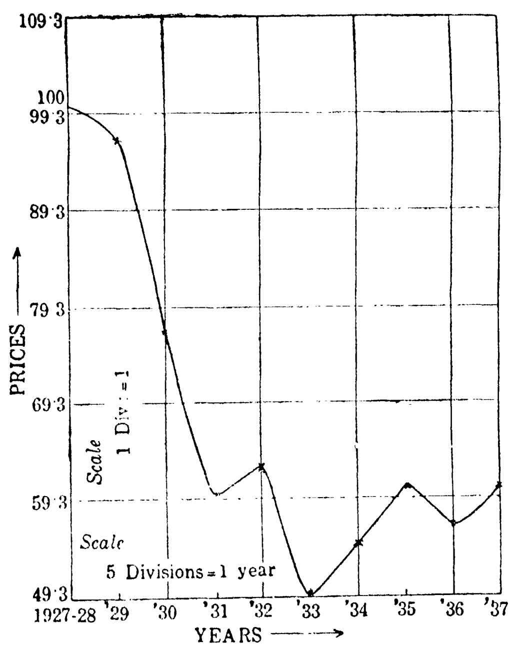
The average monthly prices of two years, 1927-28, has been assumed as the basic figure for studying the variations in subsequent years. The general price-level during these years was somewhat stable after a period of post-war boom which may be said to have lasted from 1920 to 1925. Further, as the period of study relates to the years between 1929-37, it is best to take 1927-28 as, according to the well-known authority of Prof. Alfred Marshall the previous year is the best base year. Again, 1927-28 are the years immediate preceeding the beginning of the period of great Depression which forms an important part of the present study.

	1927—28	1929	1930	1931	1932	1933	1934	1935	1936	1937
Rice	100	94·2	81·0	61·3	62·4	51·1	51·1	58·2	56·9	56·9
Paddy	100	84·2	71·4	50·2	56·0	43·4	46·5	67·3	51·1	52·9
Ragi	100	93·2	66·1	42·0	48·9	38·3	48·5	73·1	62·6	51·0
Dhal	100	93·0	87·3	68·3	59·1	48·3	58·4	59·9	52·4	69·5
Javaree	100	93·7	71·9	41·3	48·1	51·3	60·3	71·4	60·3	53·4
Ballar	100	86·2	116·1	72·7	57·9	45·7	74·0	66·8	63·2	76·3
Horsegram... ...	100	65·8	52·9	47·5	46·3	37·7	49·6	58·2	42·6	42·5
Bengalgram ...	100	113·3	96·5	66·2	61·3	57·4	54·9	55·0	56·3	62·7
Wheat	100	84·8	78·2	93·4	58·5	57·9	61·8	92·9	57·6	69·6
Mustard seed ...	100	97·1	94·7	66·8	50·7	44·6	51·2	61·8	58·1	63·3
Cotton	100	87 0	69·6	56·5	60·9	56·5	56·5	60·9	60·9	56·5
Castor	100	92·0	82·4	41·0	26·1	20·2	22·4	27·4	26·5	27·4
Till	100	79·5	69·8	61·1	65·2	31·5	50·6	76·3	57·3	60·9
Huchollu	100	87·2	66·6	39·5	60·7	38·1	42·0	66·8	60·9	58·0
Hongoy	100	96·6	68·0	58·7	60·8	29·5	51·1	53·4	70·1	74·2
Groundnut... ...	100	85·9	70·5	54·0	68·8	...	40·6	69·5	65·8	62·4
Soap-nut	100	84·5	77·6	51·7	60·3	46·5	51·7	51·7	60·3	55·2
Coffee	100	111·6	89·1	82·8	88·8	76·0	81·3	71·8	57·1	62·8
	100	110·3	93·0	84·7	91·7	67·6	74·8	61·4	53·2	53·0
Arecanut	100	97·9	74·8	60·7	88·9	76·9	62·0	53·4	51·3	73·9
Pepper	100	100·8	77·1	43·6	42·3	33·5	32·5	32·5	24·5	23·9
Cardamom... ...	100	106·0	69·7	36·6	57·3	46·8	37·4	41·9	66·9	95·1
Brownsugar ...	100	138·1	92·9	66·7	83·4	50·0	76·2	81·0	57·2	47·6
Jaggery	100	143·6	94·9	61·5	66·7	53·8	71·8	74·4	48·8	51·3
Cocoanut	100	97·3	75·1	62·7	83·5	61·7	47·2	64·4	79·1	68·6
Copra	100	108·2	83·6	53·6	75·5	75·5	51·8	55·5	71·8	78·2
Tamarind	100	80·2	77·9	57·9	57·8	58·5	48·4	52·3	81·3	67·4
Chillies	100	74·4	107·4	69·5	54·9	68·3	102·4	65·9	50·0	74·4
Coriander	100	45·8	34·0	52·1	42·6	33·0	40·4	38·3	33·0	41·5
Potatoes	100	90·8	88·6	81·5	63·8	63·5	58·8	61·7	53·6	67·5
Turmeric	100	106·0	92·0	78·0	96·0	70·0	50·0	58·0	58·0	92·0

The monthly wholesale prices of the selected commodities are taken from the books of the Chamber of Commerce and their indices are carefully worked out. The following table gives the annual Indices of the commodities selected:

The following graph indicates variations in average wholesale prices of Agricultural Commodities during the decennium 1927-28-1937:

GRAPH I



The above curve affords very interesting study. The general price-level begins its downward trend by 1929 and shows a precipitous fall by 1931. There is a slight rise in the price-level by 1932. This is due to a rise in the prices of Coffee, Arecanut, Cardamoms, Turmeric and of the oil

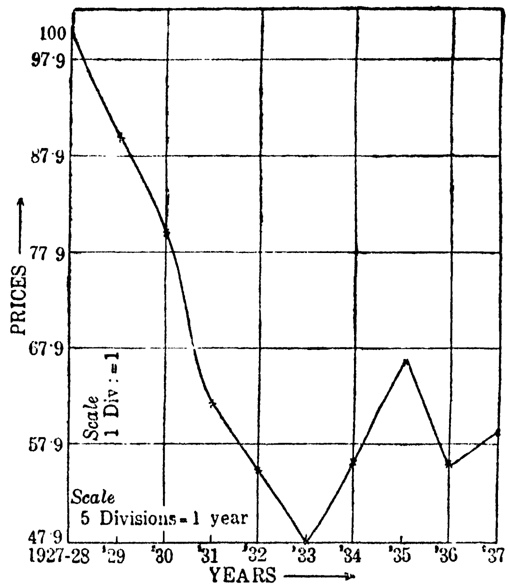
seeds excepting mustard and castor as shown by the following table:—

Years	Coffee	Arecanut	Cardamom	Turmeric	Oilseeds except mustard and Castor
1931	P. B. 82·8	84·7	36·6	78·0	53·6
	Parch 84·7				
1932	P. B. 88·8	91·7	57·3	96·0	62·8
	Parch 91·7				

This upward movement in 1932 is absent in the Index numbers of wholesale prices in Calcutta; but it is to be found in the Index numbers of Pulses in which a 3 per cent rise is noticeable. But for the slight rise in prices of these commodities, the other commodities show a continuous downward trend. The general price-level also, after the tendency to rise in 1932 results in a disheartening fall by 1933. This year (1933) is the worst year of the period and the price level is the lowest. A steady rise is perceptible in the next two years. The year 1935 finds the price-level slightly higher than the 1931 level, but again heads towards a decline in 1936. This fall is again due to a decline in the prices of Coffee (11·5%) Arecanut (2·1%) pepper (8·0%) which continues its downward course in 1937 too, sugar (23·8%), Jaggery (25·6%), Coriander, (5·3%), Chillies (15·9%) Potatoes (8·1%), oil-seeds excepting cotton, Hongey and Soapnut and a general fall by about 10% in the prices of grains and pulses. A similar fall in 1936 is found in the price-level of pulses and oil-seeds of the Calcutta Market. By 1937 there is a general upward trend and no other article of importance except Ragi and Javaree has lagged behind. Thus signs of gradual recovery are seen after 1936. Yet the price-level is still 39·2% below the pre-depression level. It must be admitted that the agriculturist is drowned nose-deep in the sea of misery, poverty and debt.

The variations in prices of *grains and pulses* which in conformity with the general trend are indicated by the following graph:

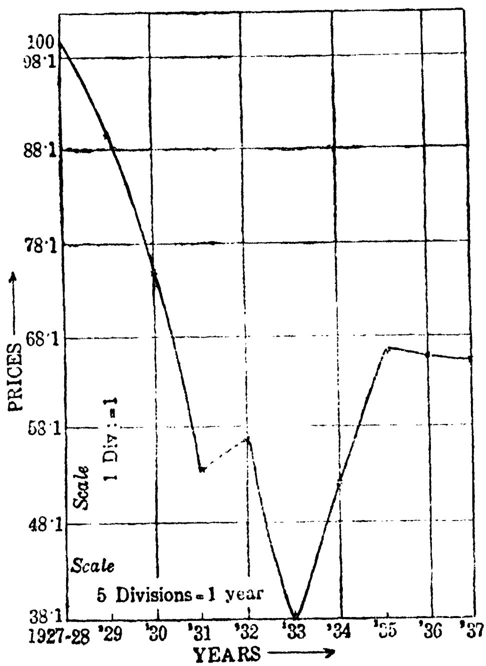
GRAPH II



By 1929 the prices begin to fall and there is a continuous process of decline heading towards a precipitous fall by 1933 when the price-level was more than 52% below the pre-depression level. As this group occupies the largest cultivated area in the state, it has most adversely affected the purchasing power of the entire agricultural community. From 1933 onwards there is an upward trend and in 1935 the price-level is higher than that in 1931, but this is only temporary. Towards 1936 there is an appreciable fall. From 1936 onwards there is a gradual recovery. Yet the 1937 price-level is nearly 41% below the pre-depression level.

Variations in the price of oil-seeds has a similar tale to tell.

GRAPH III



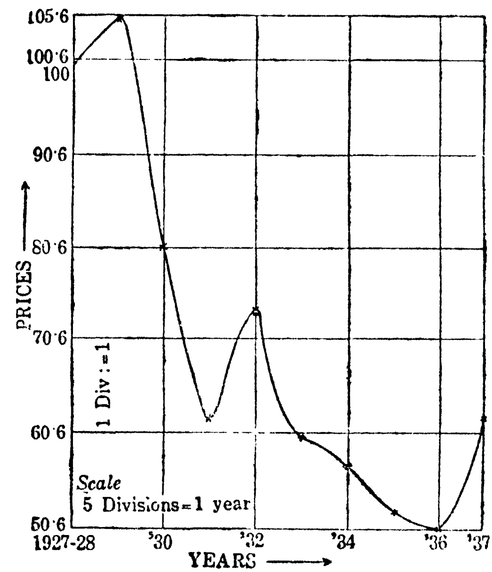
The prices begin to fall steadily since 1928 and with a slight trend upward by 1932 falls precipitously by 1933. In 1933 the price-level has fallen by nearly 62% of the basic level and this is the greatest percentage fall revealed. Signs of recovery are noticeable during 1934 and 1935 but from 1935 there is an imperceptible decline.

The Malnad products deserves special consideration as they occupy an important position in the external trade of Mysore. Out of 10,204·50 tons of Coffee valued 61·23 lakhs of rupees produced in the year 1935-36; 9,201·53 tons valued Rs. 55·21 lakhs were exported from the state.

Unlike in the other groups the year 1929 indicates rising prices and prosperity. From their height of prosperity,

the Malnad products have a disastrous fall in 1930 which caused great misery to the producers as it was sudden and

GRAPH IV

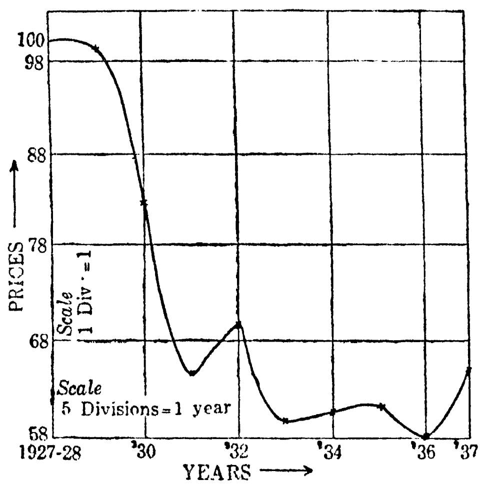


unexpected. The depression in prices continued its downward trend from 1930 to 1936 with the exception of perceptible rise in 1932 which is due to a sudden rise in the prices of Arecanut and Cardamom consequent upon a failure of crops and a shrinkage in the area of cultivation. Although signs of recovery are perceptible from 1936 onwards the price-level was still far below the pre-depression level. It must be admitted that the Malnad producers have been the worst sufferers as their commodities were more directly hit by the world depression. Moreover, as the Report on the Marketing Survey of Coffee conducted by the Department of Industries and Commerce reveals, the Mysore Coffee Planter "Obtained about 63% of the London wholesale price, about 70% of the wholesale price in Bombay and less than 55%

of the retail price, of the same type of Coffee." This non-realisation of the prices ruling in other markets for the same type of Coffee, must greatly increase the feeling of misery which is caused by the low prices themselves.

In the case of commodities coming under the Miscellaneous group the same tendency of a downward movement is clearly perceptible.

GRAPH V



Price-level shows a steep fall from 1929 to 1931 and it rises in 1932 by a small degree on account of the high price of potatoes due to scarcity of supply. Then it takes an uneven but downward course till 1936 when signs of recovery begin to appear.

In this group the interesting course of potato prices may be singled out. More than the general downward trend in the annual prices, the variations in the monthly prices are more interesting. The fluctuations in prices have been very violent and sudden. Such alternations of sudden and steep rise and fall are due to the new stocks coming into the market about 3 or 4 times a year.

It is desirable to find methods of preserving it, so that the benefits of more stable prices may be realised.

Effects of Declining Prices on Production: Although the continued fall in the prices has hit the agriculturist very hard there has not been any shrinkage in area cultivated as can be seen from the following figures:

Area under Cultivation.

		1929—30	1933—34
Ragi ...	...	2,258,854 Acrs.	2,282, 736 Acrs.
Paddy ...	...	720·825	774·397
Areca ...	...	48·519	46·608
Cocoanut ...	...	142·273	162·982
Coffee ...	...	112,876	101·920
Sugarcane	...	33,186	42·282

Except in the case of Coffee and Areca there has been an increase in the acreage under cultivation. The reduction in the area under cultivation of Coffee and Areca may be due to failure to realise proper prices.

Statistics of Imports and Exports of Mysore of the selected group of Commodities show that while the external trade has suffered in volume, it has suffered even more in value.

RAILBORNE EXTERNAL TRADE OF MYSORE OF SELECTED GROUPS FOR THE PERIOD 1928—29 TO 1936—37

Year	Imports				Exports			
	Grains and Pulses		Oil Seeds		Grains and Pulses		Oil Seeds	
	Lakhs of mds.	Mil. of Rs.	Lakhs of mds.	Mil. of Rs.	Lakhs of mds.	Mil. of Rs.	Lakhs of mds.	Mil. of Rs.
1928—29	30·31	21·63	2·10	15·06	12·89	58·18	17·03	13·99
1929—30	27·31	19·26	1·14	8·68	12·37	57·52	18·85	13·70
1930—31	24·21	14·11	1·42	8·37	8·17	29·55	16·71	8·39
1931—32	26·50	13·14	2·37	13·58	7·59	23·82	13·15	6·39
1932—33	27·96	13·79	1·42	6·78	6·52	17·91	10·87	3·89
1933—34	27·14	12·09	1·29	5·56	4·70	13·62	15·64	4·21
1934—35	38·36	18·15	2·10	9·04	3·14	9·02	5·21	2·06
1935—36	39·03	16·89	1·09	6·33	3·51	10 54	3·87	2·30
1936—37	25·76	11·06	·76	4·15	6·40	17·06	9·59	5·34

Concerning the value of land, due to the all-round decline in prices and the consequent low purchasing power of the agriculturists there is a fall to the extent of about 50% (in this period) of its original value. This naturally involved the agricultural classes in serious difficulty. During the period of post-war boom people began to lead a higher standard of life and their wants increased entailing higher expenditure. At the same time the higher credit that the farmer commanded as a result of appreciated land values was a bait to borrow heavily. The result of the sudden reduction in the price of agricultural commodities by 50% and more in many cases, made their economic stability go out of gear. With their weak bargaining power and poor resources the agriculturists have been the worst sufferers. Of the four groups of agricultural population, particularly the peasant proprietors and land-holders are intensely hit by the fall in prices. They found it impossible to clear their improvement debts which they had contracted indiscriminately during the period of high prices. At the same time great pressure was put on the ryots by their Sowcar creditors to repay their debts. This was the indirect but severe effect of the world currency muddle into which India was drawn by virtue of her position as exporter of raw materials.

The miserable plight of the agriculturist is clearly reflected in his ever-growing load of indebtedness which hangs as a millstone round his neck. Various estimates have been made of the agricultural debt of Mysore and it may be assumed that the *per capita* debt is not less than Rs. 50 amounting to about 35 crores of rupees for the State. On account of this serious handicap, as the Central Banking Enquiry Committee have observed, "The cultivator is obliged to sell his produce to his creditor at an unfavourable season and at a price detrimental to himself . . . As every grower is equally pressed for cash and has to sell at the same time the price obtained by the cultivator is naturally depressed in consequence."

Attempts to save the drowning farmer have been made in various directions. The Agriculturists Relief Act, measures to control the rate of interest, establishment of Debt-Conciliation Boards, preventing the alienation of land, allow-

ing time for repayment of debt, provision of credit through land Mortgage Banks are a few of them. The Government is also trying to improve the position of the ryot by helping him to adopt better methods of cultivation by the gradual extension of the subvention Farm System. Although the value of transmitting the fruits of Agricultural research to the ryot's field cannot be exaggerated, it must be admitted that the immediate salvation to the ryot lies in securing better prices for what he grows. What the agriculturist needs is a condition of stable prices and a proper relation between the prices of what he produces, and what he consumes. He must be assured of adequate reward for his toil. No measure would help the farmer to improve his Purchasing Power by securing higher prices so effectively as the improvement in the conditions of Rural marketing and finance. In the existing system of marketing, the agriculturists obtain money from the lenders and traders on the stipulation that the entire produce shall be sold to them at a fixed price. Further, the agriculturists' need for money at the harvest season to clear their debts necessitates their selling the produce at any price. A long chain of middlemen commission agents or dalals intercept the profits at every stage by unfair and exacting means. Lack of standard weights and measures, facilities for storage, want of organised markets and lack of knowledge regarding the areas where the commodities could be marketed to the best advantage, and lack of adequate means of transport and communications (especially in Malnad) are serious defects in the present system of marketing.

Some of the suggestions made by the National Planning Committee which has deliberated over this vital problem have been incorporated with the measures of relief and improvement stated below:

1. Steps should be taken to explore the possibilities of developing 'utilisation industries', such as husking Paddy, canning fruits, grinding wheat, curing tobacco, etc. which would fetch higher prices.

2. Adulteration of food has become a menace and the consumer should be educated to appreciate purity of foodstuffs, and pure food laws should be enforced.

3. Suitable institutions for providing short and long-term loans must be developed. There should be steady development of Land Mortgage banks and co-operative societies to provide loans on the hypothecation of crops.

4. Ware-houses for storing the produce should be established and ware-house receipts may be used as security for obtaining accomodation.

5. Regional investigations on the problem of Rural marketing should be made on scientific lines and a suitable agency for providing more reliable statistics should be started.

6. Rural marketing should be organised on co-operative principle to eliminate unnecessary transportation of goods.

7. Standardisation and grading of agricultural produce should be introduced and grading stations under Government control established. The Market News Service should be further developed which might be entrusted to the Mysore Chamber of Commerce.

These suggestions are of immense practical value, in securing better prices for agricultural commodities. If put into effect systematically, they would enable the Mysore agriculturist to realise better prices for what he produces and lead a better life.

The Mysore State follows an energetic policy in assisting the agriculturists. One is impressed by the scope and variety of the expedients devised by the Agricultural Department to make farming a profitable enterprise. The working of Tobacco barns for purposes of curing, the encouragement given to husking of paddy and preparation of syrups and Attars as rural industries, the starting of the Coffee Curing Works to enable the planters to receive better prices; the extension of Land Mortgage Banks to several taluks of the State, conducting Marketing Surveys of individual crops—Coffee, groundnut, copra, etc., on scientific lines, and lately, the starting of co-operative Marketing Societies for Areca, honey and figs are indeed a few items in a well rounded programme of agricultural development in Mysore. There is no lack of effort on the side of Government, but there is conspicuous absence of response on the part of the agriculturist, who as in other parts of India is unenterprising and lethargic. Better business, better living and better prices can be

achieved only when the agriculturist fully utilises the various agencies that a paternal Government places at his disposal.

SUMMARY

[India recovering from the effects of a severe economic depression—Disastrous fall in the prices of agricultural commodities —the factors at the background of the price fall.

Object of the paper is to study the trend of prices of agricultural commodities in Mysore during 1928—37 and to investigate effects on production, trade, value of land and the standard of life and general economic position of Mysore agriculturists.

The method of study:—wholesale prices collected from the books of the Mysore Chamber of Commerce and the indices worked out. Classification of commodities into groups (1) Grains and Pulses, (2) Oil Seeds, (3) Special Malnad products, and (4) Miscellaneous agricultural products.

Study of the price movements: (*a*) General and (*b*) the several groups.

Effect of price-fall on production with reference to area under cultivation;

" " Trade—study of imports and exports;

" " value of land;

" " the general economic position of the agriculturists—the heavy indebtedness of the farmers and the measures of relief.

Defects of marketing system and suggestions for improvement. Work of the Government of Mysore in this direction.]

PRICE MOVEMENTS OF SOME IMPORTANT AGRICULTURAL COMMODITIES IN HYDERABAD[1]

BY

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The advent of the War has created many problems for the economists to consider. One of the problems which is being prominently discussed these days is how to control the prices of necessaries of life.

The Government of India was prompt enough to realise the implications of the situation, created by the declaration of the war, and issued an ordinance to control prices, especially the prices of the necessaries of life and to discourage profiteering. Under this Ordinance rights were given to the Provincial Governments to control the prices of necessaries of life including the prices of medical and pharmaceutical products. The Government of India reserved to itself the right to control the prices of imported articles. Within a fortnight of the declaration of war some sort of organisation was set up in each province to check the tide of rising prices. Soon after the declaration of the war, H.E.H. The Nizam's Government set up a Committee to control prices in the Dominions. I have the privilege to serve on this Committee. Although the limitations of the Provinces do not, in any way apply to this Dominion, for the sake of uniformity we confined our attention to the same range of commodities that were controlled by the various Provincial Governments.

[1] In the first part of this article the prices of only those agricultural commodities are discussed which ener into the consumption of masses. I am indebted to the Directors of Statistics and the Commerce Industries, Departments of H.E.H. the Nizam's Dominions for providing me with Statistical data.

Some Changes in the Prices are not Purely due to the War.

In analysing the changes that have taken place in the prices of important agricultural products, it must always be borne in mind that ordinarily prices also fluctuate and sometimes quite considerably due to the forces of supply and demand and various other rational and irrational causes which have no connection whatsoever with the war.

One of the main causes for the rise in the price of coarse rice after the war was a serious drought as a result of which the rice crop in 1939—40 was very poor in the Dominions. Again the price of sugar in 1939 stood at a higher level, which it has failed to reach throughout the war period.

The index of wholesale sugar prices in April 1939 was 109, if we take the August 1939 price as 100. At the end of September 1939 (one month after the declaration of war) it stood at 103. On 1st October 1936 it was only 88.

An important factor which leads to considerable rise in the prices of several important articles was heavy speculation. The very moment the news of the declaration of war reached India, the prices of number of commodities began to rise hectically, and a panic was created in the country. There was no economic justification for this phenomenal rise of prices at this early stage of the war. But who cares for economic calculations at periods of crisis? The merchants wanted to make as easy money as possible. This was but natural. It has been alleged that merchants and shopkeepers withheld stocks and were guilty of exploiting the situation. This is true. But many consumers were equally guilty of the same charges. They aggravated the situation by buying far in excess of their normal demand with a view to hoard as much as possible. But in my opinion, the chief culprits were the big merchants who were trying to corner the market by buying all the possibly available stocks from small traders. A major part of the hectic buying that was going on during the first and second week of the war was mainly by the big merchants with a view to hoard and to exploit the consumers later on. Cases on a very large scale have come to the notice of the writer that merchants in big

towns sent their agents to the interior where the prices had not risen so much, to buy all the available stocks from the small shopkeepers.

An Explanation of Hyderabad Price Indices.

The indices of price movements of important agricultural commodities which we shall give in this paper apply only to Hyderabad Town. The chief appraiser of the State Customs Department prepares a list of weekly wholesale and retail prices which is published by the Department of Statistics. Also the Superintendent of Municipal Markets prepares a list of retail prices prevailing in the municipal markets. The Hyderabad Price Control Committee felt that in order to keep itself in touch with the daily market prices, it was necessary to have some agency of its own. Consequently two well qualified graduate inspectors were appointed to prepare a list of daily prices. Our statistics are supervised by three independent agencies and could be considered fairly accurate.

The Hyderabad Base.

We have taken the mean average price of *August 1939 as our base.* In some provinces the base has been taken as 1st September, 1939, which in our opinion, is little misleading because the prices of a number of articles rose considerably on 1st September due to the attack of Germany on Poland.

I

The Trend of Prices of Important Agricultural Commodities: Rice.

The wholesale price of coarse rice in January 1936 was 94. It fluctuated from 85 in October 1936 to 103 in September 1937. It reached the lowest figure of 82 in October 1938, and again after rising to 94 in February 1939 it fell to 80 in May 1939, the lowest point reached since 1936. But owing to lack of monsoon it began to rise steeply from May 1939, and reached 100 in August 1939. This movement clearly shows that a trend towards rise existed

several months before the war. During the first month of the war the rise in the price of rice was not very serious. It rose from 100 to 106. But owing to shortage of rain the new crop was considerably smaller. Usually the rice prices are very low in October, but this time the greatest rise took place during October and the index figure jumped from 106 in September to 124 in October. In other words, while the rise during the first months of the war was only 6 per cent. the rise for the second month was about 18 per cent., three times more than the previous month, and the index figure at the end of October stood at an impressive figure of 124. After a small fall it again rose to a record rise of 139 in March 1940, and since that date the prices have been fluctuating within narrow margin.

Red Wheat.

The rise in the price of red wheat which is mostly consumed by the working classes has been less spectacular but it must be remarked that even this poor quality of wheat is not much consumed in the Dominions as compared with coarse rice or other cereals.

The index of wheat prices stood at a very low figure of 70 in January 1936, and after this date began to rise steadily reaching a record figure of 121 from September to November 1937. After that date there was a gradual decline and the lowest limit of 82 was reached in June 1938 but again rose to 94 in July 1938. Between August 1938 and June 1939 there was a gradual decline and with minor fluctuations. The price index stood between 85 and 88, but again began to rise reaching 100 in the end of August 1939. In the end of September it rose only to 103 and since that date it has remained remarkably steady ranging between 103 and 100, at the end of August 1940 it was only 100.

Jawar (2nd Quality).

After coarse rice, the next most important article of diet in this Dominion consumed by the working classes is jawar especially of the poor quality.

From January 1936 to October 1938 the price of rice fluctuated between 75 and 67. After that date it began to rise. In May 1939 it stood at 78 and afterwards began to rise rather steeply reaching 100 in August 1939. After the war the price, instead of rising, began to fall, and in August 1940 reached almost the same level as in May 1939, *viz.*, 78.

Bajara.

The story of the movement of the bajara prices is almost identical with jawar. There has been a fall in its price after September 1939.

Mung (Green).

The price of mung shows very wide fluctuations. It rose from 60 in January 1936 to 127 in June 1937, falling again to 75 in February 1939. At that date it began to rise and reached 100 in August 1939. There was a sudden jump in its prices and it continued rising, until it reached the high figure of 140 in the middle of October, and after a fall of 15 degrees again reached the October level in May 1940. After that date there has been a steep decline, the index reaching to a low figure of 91 in August 1940.

Tuar Dal.

The price of tuar dal has not risen since the war. As a matter of fact it fell after the war but reached to 106 in April and May 1940, and again declined to 98 in August 1940.

Sugar (Refined).

The price movements of refined sugar reveal some very interesting facts. In January 1936 the price stood at 90 and fell to the lowest point of 70 in April 1937. After that date it gradually began to increase and stood at a record figure of 109 in April 1939. After this date it began to decline and reached the low figure of 88 in June 1939. Owing to shortage of stocks and the failure of the arrival of orders from Java the price stood up to 100 in July 1939 and

remained stationary at that figure up to the declaration of the war, after which date it began to rise and reached 103 in November 1939. After this date it again began to decline and reached 90 in August 1940.

Gur.

The trend of gur prices reveal a very tragic story. The price was very low on 1st January 1936. The index number being only 45. But the tendency towards further decline continued, till it reached the absurdly low figure of 26 in January 1937. Then the price began to rise in a zigzag manner until it reached the high figure of 102 in May 1939. After the war the rise continued for two months and it reached 109 in October 1939. After that date there has been a steep decline until in August 1940 it reached a low figure of 56.

The Trend of Price Movements.

The trend of these price movements reveal that except coarse rice there has been no appreciabe rise in the prices of other commodities. On the contrary, there has been a considerable decline in the prices of a number of other commodities.

II

Price Movements of Some Raw Materials.

Let us see what has been happening to the raw materials. As I shall confine myself to only those raw materials which are produced in the Deccan, therefore, I shall not consider the price movements of Jute. The important raw materials of the South are cotton, castor seed, linseed, groundnut, and tobacco.

Cotton.

The index number of cotton prices has been fairly steady at 111 for the past month. This shows a rise of 11 per cent. since September 1939. But the present crop is

good and serious apprehensions are felt that shipping difficulties and the possible entry of Japan in the present conflict may seriously affect the cotton prices in the next season.

Linseed.

The price index of linseed has fallen to 82 and the future improvement seems unlikely as this crop is predominantly an export crop and a considerable part of it used to go to non-empire countries before the war.

Castor Seed.

Hyderabad is the largest castor producing area in India. The price index of castor seed has not fallen so far, but a fate similar to linseed is feared for the next crop.

Groundnuts.

The price index of groundnuts have fallen from 100 to 93 in September 1940, and in the next season more fall is considered likely.

Conclusion.

The conclusion of all these price changes is clear. In one sentence, these trends show that the Deccan cultivator has not profited by the war, and if the export difficulties continue he may fare still worse. The rise in the price of rice has not much helped the small cultivator. As a matter of fact it has increased his cost of production.

SUMMARY

[This paper has been divided into two parts. In part I, I have described the price movements of those commodities which enter into the consumption of masses. In part II, the price movements of some important raw materials have been discussed. The mean average price of August 1939 has been taken as the base price=100. In order to show the trend of prices before the war, I have gone as far back as 1936.

In part I, I have described the trend of prices of rice, wheat, jawar, bajra, mung, tuar dal, refined sugar and gur.

The trend of these price movements reveal that except coarse rice, there has been no appreciable rise in the prices of other commodities. On the contrary, there has been a considerable decline in the price of a number of commodities.

In part II, the price movements of some important raw materials like cotton, linseed, castor seeds and groundnuts have been examined.

The conclusion of all these price changes can be summed up in one sentence. These trends show that the Deccan cultivator has not profited by the war, and if the export difficulties continue, he may fare still worse.]

THE PRICES OF FOOD GRAINS IN MADRAS IN THE 19TH CENTURY

BY

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In Western countries, statistics of prices are available for many centuries. In regard to India, such statistics do not exist for earlier periods, and even for the 19th century our information is rather scrappy. Only in 1861 did the Government of India begin publishing prices, and most Provincial Governments started much later. In Madras, however, we are fortunate in having records which give an uninterrupted series of prices for most districts since 1800. Figures for the earlier half are found in the records of the Board of Revenue, because the Board laid great stress on the District Collectors giving details of prices in their annual reports. Statistics of prices for the second half of the century are found in the annual administration reports of the Presidency (from 1858), District Manuals and "Reports of Prices and Wages in India" (which has since ceased publication). These records were carefully examined by two research students, Dr. A. Sarda Raju and Mr. B. Natarajan. I have utilized in this paper the statistics drawn up by them, and my colleague, Mr. Sundararama Sastry helped me in working them up.

Till the middle of the 19th century, prices in India were not influenced substantially by those in the West, as communications were difficult in those days, but since 1850, and especially since 1869 when the Suez Canal was opened, India got linked up with the West, trade increased by leaps and bounds and prices here began to keep in step with what have now come to be called 'world prices.' Especially in the case of articles which have a world market, *e.g.*, cotton, jute, tea, oilseeds, etc., there arose a world price which was kept up by the ease of communication and cheapness of

transport. Such was not the case in former days. Two centuries ago, when pepper was selling at 2 or 3 annas per lb. in Malabar, the Dutch sold pepper at 5 or 6 shillings in Europe, not merely because they had then a monopoly of it but because the transport charge to Europe was prohibitively high.

The price statistics available are mostly of food grains. The prices of certain other articles are also available for some periods and for certain districts, but only for foodgrains are the price statistics complete and continuous. After all, foodgrains were then, and continue to be even now, the principal crops of the Presidency. In 1899, 80 per cent of the cultivated land was under foodgrains, and this is the case more or less even to-day. The foodgrains taken are rice (paddy), ragi, cholam and cambu. The average prices for each District have been calculated from monthly returns and from this the average for the whole Presidency has been arrived at. The prices taken are wholesale prices in rupees per garce of 3,200 Madras measures. Retail prices would have been better, but they are only available for the last 40 years of the century and they have more or less followed the wholesale prices. It must be pointed out also that the weights and measures used were not uniform from district to district, even from taluk to taluk. We may concede also that the prices recorded were not actual prices in all cases but general estimates. As we have used the prices of a fairly large number of districts for making up the average, these individual anomalies have largely cancelled out: Even then it must be admitted that these defects detract from the value of the statistics. Perhaps the contemporary statistics of Europe were not very much better.

The accompanying table gives aggregate index numbers of the prices of the four foodgrains with the yearly and three-year moving averages. The average of the prices of the year 1901-2 to 1910-11 is taken as the base. The index numbers have not been weighted, as we have no adequate data regarding the relative importance of the various grains. This may not be a serious defect, seeing that the dry grains were then almost as much important as rice, if not more important,

Index Numbers of the Prices of Food Grains in the Madras Presidency—1801-02 to 1900-01.

Base 1801-02 to 1810-11 = 100

Years	Paddy	Ragi	Cholam	Cambu	Average	3-year moving average
1801-02	93	98	90	92	93	...
1802-03	92	88	89	85	89	95
1803-04	105	105	100	107	104	103
1804-05	115	121	114	119	117	108
1805-06	101	107	101	106	104	120
1806-07	136	126	152	138	138	123
1807-08	120	123	133	132	127	115
1808-09	84	84	75	81	81	93
1809-10	74	75	70	68	72	76
1810-11	77	75	72	77	75	79
1811-12	93	93	86	90	91	94
1812-13	112	118	115	113	115	106
1813-14	105	113	113	111	111	107
1814-15	90	95	98	95	95	93
1815-16	73	69	75	74	73	80
1816-17	77	67	72	70	73	76
1817-18	80	78	84	82	81	79
1818-19	78	86	86	87	84	83
1819-20	78	89	87	80	84	84
1820-21	77	88	91	82	85	88
1821-22	91	98	96	92	94	91
1822-23	89	97	99	95	95	105
1823-24	113	131	129	136	137	124
1824-25	141	158	152	143	149	129
1825-26	106	115	119	108	112	113
1826-27	81	83	76	73	78	87
1827-28	73	74	66	66	70	73
1828-29	76	77	69	67	72	75
1829-30	82	85	83	77	82	75
1830-31	75	73	65	68	70	72
1831-32	69	66	62	63	65	82
1832-33	104	115	108	117	111	107
1833-34	136	154	145	143	145	118

Years	Paddy	Ragi	Cholam	Cambu	Average	3-year moving average
1834-35	94	102	99	95	98	105
1835-36	75	68	66	64	71	85
1836-37	94	88	82	77	85	82
1837-38	95	93	90	76	89	92
1838-39	101	100	96	108	101	91
1839-40	85	85	81	80	83	86
1840-41	80	73	66	80	75	72
1841-42	64	58	55	54	58	62
1842-43	59	53	49	51	53	54
1843-44	53	50	48	49	50	55
1844-45	64	56	57	65	61	69
1845-46	94	96	91	104	96	85
1846-47	95	95	93	107	98	93
1847-48	62	83	83	88	84	83
1848-49	70	67	65	67	67	72
1849-50	68	63	62	63	64	65
1850-51	65	62	64	63	64	63
1851-52	62	61	64	58	61	62
1852-53	60	60	61	62	61	73
1853-54	90	100	99	102	98	90
1854-55	104	113	117	113	112	108
1855-56	112	119	112	117	115	106
1856-57	96	93	89	90	92	106
1857-58	109	113	107	117	112	113
1858-59	136	138	131	140	136	123
1859-60	122	127	114	126	122	129
1860-61	129	133	119	132	128	141
1861-62	141	143	135	139	140	138
1862-63	148	146	146	144	146	146
1863-64	149	154	155	155	153	157
1864-65	177	175	164	174	173	173
1865-66	189	193	188	198	192	203
1866-67	230	261	242	247	245	200
1867-68	169	177	155	149	163	189
1868-69	162	163	149	157	158	157
1869-70	160	150	141	151	151	146
1870-71	133	129	125	132	130	132

Years	Paddy	Ragi	Cholam	Cambu	Average	3-year moving average
1871-72	119	109	109	118	114	123
1872-73	126	118	122	128	124	125
1873-74	124	136	136	150	137	131
1874-75	125	130	130	138	131	132
1875-76	118	130	125	134	127	174
1876-77	205	281	272	294	263	235
1877-78	261	341	321	337	315	302
1878-79	205	241	230	235	228	234
1879-80	250	169	154	168	160	171
1880-81	132	125	115	128	125	133
1881-82	126	118	101	116	115	118
1882-83	126	116	99	116	114	115
1883-84	128	116	105	118	117	125
1884-85	143	140	134	153	143	134
1885-86	141	139	136	152	169	138
1886-87	131	128	120	134	128	132
1887-88	126	123	119	137	126	130
1888-89	135	134	124	149	136	135
1889-90	148	134	130	150	142	145
1890-91	162	148	147	166	156	168
1891-92	187	211	202	228	207	185
1892-93	182	193	189	206	193	182
1893-94	164	171	171	193	175	174
1894-95	158	148	149	163	155	157
1895-96	152	133	136	146	162	161
1896-97	176	185	192	237	230	197
1897-98	217	230	236	237	230	197
1898-99	171	181	167	188	177	203
1899-1900	183	209	201	213	203	205
1900-01	213	243	241	243	235	212

Two well-marked periods are clear from the statistics shown above; one from 1801 to 1850 and the other from 1850 to 1900. In the first period, prices were low and falling; in the second, prices went on rising, sometimes slowly, sometimes rapidly. In both periods, there were years of high prices due to crop failure and scarcity—when

prices went up suddenly, but this does not materially disturb the general trend.

The index numbers and the accompanying graph show the change in prices from year to year. But as noted above, these are subject to the general secular trend during the perids in question and if we eliminate the effects of these trends we get the real fluctuations of prices. By applying the mathematical method of polynominal regression for eliminating the secular trend, certain periods of booms and depression will be noted. In the first half of the century, the year 1814 to 1820, 1826 to 1831, and 1840 to 1844 were periods of depression; the years 1803, 1807, and 1821 to 1825 were periods of boom. In the second half, 1869 to 1875, 1879 to 1890 were periods of depression and 1860 to 1868 and 1896 to 1900 periods of boom. It will be noted that some of these periods synchronise with similar periods of depression and boom in Europe.

We will now deal with the two periods in greater detail.

Period I—1800-50.

The first period began with fairly high prices, followed by a fall after 1815. In spite of scarcity and high prices in certain years (1826 and 1833), the trend was downward and prices reached the nadir in 1843-44 and remained low in the forties as a whole. The period 1820 to 1849 was one of depression in Europe also; but considering the rather slow trade relations between India and the West at the time, the connection between these two is not clear. We know, however, that analogous causes operated in both countries. According to Sir Walter Layton, the depression of 1820 to 1850 was largely due to the slump in the output of precious metals. This was bound to affect India also, seeing that her supply of gold and silver came from outside.

A general fall of prices must be due either to the decrease of the circulating medium or to the increase in the demand for the circulating medium (*i.e.*, an increase in the duty performed by that medium) or by a combination of both these causes. In the case of the period under considera-

tion, both these factors seem to have operated simultaneously, and hence the persistence of low prices during the period.

Till 1820, India exported large quantities of cotton piece-goods to Europe and to other parts of Asia, and as India's imports were not large, payment was made to India in bullion, and thus treasure flowed into the country. In the meantime, thanks to the Industrial Revolution, Great Britain was becoming the cotton workshop of the world, and not only did India lose her markets abroad; her own internal market came to be flooded with cheap cotton textiles from Lancashire. This revolutionary change happened chiefly between 1820 and 1830. As a result, India's export trade declined and the balance of trade, hitherto highly favourable to India, ceased to be such. At the same time, the habit of settling India's dues by means of bills grew and this obviated the need for shipping treasure to India. As a result, not only did the influx of treasure cease; instead a large quantity of treasure was sent out from India, partly on Government account and partly on private. Such exports of treasure (net) totalled Rs. 16 crores between 1820 and 1850. Very little bullion therefore came to be coined in the Madras Mint, and the Mint Master of Madras in 1851 complained of this drain of specie "owing to political circumstances." Hitherto the Company had been 'investing' a large part of its revenue on the purchese of local goods, and this formed an important factor in the monetary circulation of the country. When this ceased, a currency famine ensued.

It was at such a juncture that the Government introduced a drastic currency reform in India. Till then different kinds of rupees and other coins of various kinds had been in circulation. By the Currency Act of 1835 all such currency was withdrawn, and the Arcot Rupee was made legal tender in the whole of India. From the currency point of view, this step was one in the right direction, but its immediate effect was to reduce the quantity of the circulating medium and thus aggravate the deflationary factors already operating.

Thus there was a tremendous fall in the quantity of money in circulation. At the same time the volume of transactions had been on the increase. The country was

passing from a barter to a money economy. Cash payment took the place of payments in kind. Not only private persons but government resorted to this; all its revenue receipts came to be in cash. At the same time, population was also increasing. It rose from 13·5 millions in 1822 to 22 millions in 1850. A growing population needs an increasing circulating medium; but what actually happened was the other way. The supply of money diminished greatly when the demand for it was increasing. Judging from all the materials available, this depression was a severe one, and perhaps unprecedented in the annals of India. It was accompanied by drastic changes in the industrial and commercial position of the country, and hence the intensity of its effect.[1] Nor was the depression confined to Madras, nearly the whole of India came under it.

Period II—1851-1900.

After 1850, prices began to rise, and the upward tendency was kept up during the whole century. The rise was rapid between 1852 and 1867; subsequently there was a setback, which continued till 1884 (except for the years 1876—79 when prices soared, owing to scarcity and famine conditions). After 1884, the rise of prices was continuous and was kept up till the close of the century. In the years, 1891-92 and 1896, they were spurts in prices, caused by famine or scarcity.

This upward trend of prices was due to a conjunction of circumstances. With the discovery of gold mines in Australia and California in 1849, Europe became flooded with supplies of specie. As a result, prices rose and industrial activity became brisk. A great demand arose in Europe for India's produce, namely, raw jute, raw cotton, oilseeds, coffee, etc., and this demand became particularly keen in periods of war—Crimean War and the American War of Independence. The export trade of Madras increased from Rs. 261 lakhs in 1850-51 to Rs 915 lakhs by 1865-66. Thus in a period of 15 years,

[1] Thomas and Natarajan, *Economic Depression in the Madras Presidency,* (1820-50), *Economic History Review,* November, 1936.

the export trade more than trebled itself. The balance of trade having become highly favourable to India, treasure again flowed into the country. This tendency was helped also by the large loans raised in England by the Government and by private companies for constructing railways and opening plantations. Much of the bullion went into the mint and was converted into coins. The introduction of the paper currency system in 1861 also added to the circulating medium.

After 1868, prices began to fall. The sudden contraction of cotton exports to England was the immediate cause; the temporary fall in the investment of foreign capital in India was also a cause. While thus the supply of currency was dwindling, the demand for it was increasing, as trade and production in the country had been growing rapidly during the period. The downward tendency of prices received a check in 1884, and from that year prices began to soar again. This was largely due to the rapid increase in export trade and the influx of bullion which a highly favourable balance of trade brought about. From 1873, silver prices began to fall and the rupee exchange sagged. The part played by the falling exchange on overseas trade and internal price-level is still an open question and I shall not dilate on it in this connection.

When prices were slumping and later when they were rising, certain theories regarding their causes were expounded by officials and these theories clearly show the influence of classical political economy which many of them had imbibed in their days at Haileybury College where Malthus taught and his friend Ricardo was an occasional visitor. Mr. Robertson, Collector of Coimbatore, ascribed the rise of prices to the growth of population and the working of the Ricardian law of rent. With the increase of population, resort to less fertile land became necessary; this meant higher cost, and hence the rise of prices. This line of reasoning did not make any impression at the time, and perhaps it deserved no bettter reception. After 1900, the

[2] This whole subject will be dealt with in a forthcoming work.

rise of prices continued and culminated in the war ooom of 1914—18.

N. B. This whole subject will be dealt with in a forthcoming work.

SUMMARY

[This paper deals with a hundred years of food prices in S. India, drawn up from the records of the Government of Madras. The trend of prices shows that there was a severe depression in the peiod 1825—50. From 1854, something like a price boom developed, but it burst in 1867, and was followed by a depression which lasted till 1884 (except for the years 1876—9, when prices ruled high owing to famine). From that date, prices began to soar and this continued till the end of the century. The connection between price-trends in India and Europe before 1850 was not clear, but since that time Indian prices were largely influenced by world prices.]

REVIEW OF FINANCES IN BENGAL (1937—41)

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Changes in the Financial position and Functions of the Provinces consequential to the Introduction of Provincial Autonomy.

With the inauguration of the Autonomy under the Act of 1935, there had been considerable changes in the financial position and functions of the provinces. The improvement in the financial position is in two directions: (*a*) cancellation of debts to the Central Government and (*b*) award of additional sources of revenue. Besides these, the provinces have been granted substantial borrowing powers, the only conditions being that they need only seek the sanction of the Central Government if a loan granted by that Government is still outstanding or if they propose to borrow outside. Their power to tax is now over a wide area—the entire field of taxation covered by the Provincial Legislative List and the Concurrent List.

But side by side with these, there have come great functional changes in connection with provincial finances. Previously they used to depend upon the centre for their Ways and Means operations and used to bank with the Centre. Now they are to be responsible for their own Ways and Means and have to bank in their own name with the Reserve Bank of India. There has also been a great change with regard to the balances. "The accounts of provinces with the Reserve Bank are credited with their unearmarked provincial balances, Famine Funds, Depreciation Funds, etc., and the unspent amounts of Road and Development resources assigned to provinces in the past in advance of requirements."[1] Moreover, as is well known, there are a variety of non-government deposits which are included in the Public Account for the liquidation of which the state is

[1] *Vide* Niemeyer Report, Appendix III, para 1.

responsible, such as provident fund deposits, and balances of municipal and other local authorities. These were hitherto banked with the Government of India. These, together with any liabilities attached to them, now pass to the provinces concerned. Next, with reference to accounting, the change may be briefly described as follows:

With the separation of balances from the 1st of April 1937, the previous rules of the Central and Local Governments in relation to treasury balances within a province have been completely reversed. Hitherto, the Central Government acted as banker and the Provincial Government as the client. After separation, the Provincial Government has become the banker and the Central Government the client. The physical cash in the treasuries and subtreasuries as on the 1st of April, 1937, became the property of the Provincial Government. The net results of central transactions in all treasuries and sub-treasuries of a province, in so far as such transactions have been taken against its balances, are worked out by the Accountant-General and embodied in a periodical transfer between the balances of the Central and Provincial Governments in their accounts with the Reserve Bank. Each Government is responsible for providing the means of meeting not only their revenue and capital expenditure, but also a large body of transactions of a local nature associated with debt, deposit and remittance heads.

As regards the balances in the Bank, the Central and Provincial Governments each keep its own separate balances with the Reserve Bank. Provinces were initially provided with balances of cash and credit in the Reserve Bank against their book balances with the centre as on 31st March, 1937, which included *inter alia* the net results of financial adjustments under the schemes referred to in paragraphs 19 to 21 and set out in details in Appendix III of the Otto Niemeyer Report, for the decentralisation of balances and cancellation and consolidation of debt. At the offices and branches of the Reserve Bank and the Imperial Bank acting as agent of the Reserve Bank, the procedure is that the treasury officers and other officers of government, authorized to draw or pay money by cheque or otherwise, classify each transaction as central or provincial. Thus each office or branch of

the Bank deals with two groups of accounts, *viz.*, that of the centre and that of the provinces instead of one as before. All adjustments between the central and provincial governments or between different provinces are carried through a separate organisation of the Reserve Bank at Calcutta namely the Central Accounts Office of the Bank. This office operates as a General Clearing House and acts on instructions received from various Accounts Officers all over India. The effect of these arrangements is that different governments which had hitherto operated on common body of cash on the central government, now settle the transactions through the common organisation of the Reserve Bank.

Actual effect of these changes on Bengal's finances.

The actual effect of these changes on the finances of Bengal has been really encouraging. The budget estimates for 1937-38, the first year of the autonomy period, showed a surplus of 33·98 lakhs after several years of continuous deficits.[2] Our debts to the centre amounting in total to 8·41 crores inclusive of the deficit borrowings as they stood

[2] Deficits in lacs.

1930-31	174·45
1931-32	199·46
1932-33	129·79
1933-34	175·94
1934-35	5·28
1935-36	3·70
1936-37	Budget 40·24
	Revised + 3·31

Cf. "And 1937-38, the first year of new reforms, synchronises with a substantial improvement in our financial position. For the first time in a decade, we are on the right side of the Budget by the not inconsiderable amount of 34 lakhs. And if we take into account the opening balance of 98 lakhs, the increased expenditure of 89 lakhs and surplus itself, it will be seen that the improvement in our finances, though not of course in our recurring income, may be computed at over 2 crores. This is a position from which a government, circumstanced as we are, should feel happy to make a start." *Vide* the Budget Speech of the Hon'ble Mr. N. R. Sarkar, 1937-38. p. 16.

on 31st of March, 1936, were cancelled. This has reduced our annual expenditure on interest by 23 lakhs. Award of additional sources of revenue[3] brought in 70 lakhs. It is very important for us to realise in this connection, that our acquisition of an interest in jute export and in the yield of income-tax in case the Indian Railways prosper, "has forged a further link between our financial fortunes and trade conditions in the world at large. The same process will be carried a step further when we come to acquire an interest in those other Federal taxes under sections 137 and 140(1) of the Act which are assignable, in whole or in part, to the provinces, and when we come to impose taxes of our own such as sales taxes, whose yield in one degree or another will depend upon economic conditions at large."[4] Over and above these, the Government of India, in pursuance of the Niemeyer proposals, placed at our disposal 97·78 lakhs to start with as our opening balance for specific purposes.[5]

[3] Additional 45 lakhs as our share of Jute Export duty being increased to 62½% and 25 lakhs as share of proceeds of Income Tax assigned to provinces.

[4] *Vide* the Budget Speech, 1938-39, pp. 2-3.

[5]

Minimum balance required to be kept in the Reserve Bank	25	lacs
Loose cash in Treasuries outside banking account	24	,,
Famine Relief Fund	3·39	,,
Depreciation Reserve Fund—Government Presses	3·42	,,
Subvention from Central Road Development of Industries	37·11	,,
Deposit Account of grant for Development of Indutries	1·19	,,
Deposit Account of grant for economic development and improvement of rural areas	2·87	,,
Suspense Account	·80	,,
	97·78	lacs.

Vide Civil Budget Estimates for 1937-38, p. 2.

Next comes the effect of Sir Otto's scheme of decentralisation of balances. It may be recalled that with the separation of finances, liabilities for a variety of non-government deposits, banked with the Government of India, were passed on to the provinces without the corresponding assets. Sir Otto came to the finding that these deposit heads were likely to grow rather than diminish, the incomings in any one year exceeding the outgoings. He, therefore, recommended in Appendix III to his Report that the surplus balances in these deposit accounts should be used as a set-off against debts by the provinces to the centre.[6] "The success of his arrangement", as was very rightly pointed out by the Finance Minister, "may, however, be jeopardised by a sudden increase in the extent of our disbursements unsupported by a connected income."[7] He illustrated this with reference to deposits on account of landlords' transfer fee. "The deposits so far made in respect of this transfer fee", observed the Minister, "exceed 50 lakhs, and if the fee is to be abolished by an amendment of the (Bengal Tenancy) Act stopping the income on this score, we should find ourselves saddled with a liability of 50 lakhs to be liquidated in the course of five or six years with practically no specific resources to meet such a liability. This will not only adversely react on our Ways and Means position, but will also entail an uncovered obligation to be liquidated in the course of a very short period."[8] His apprehension came to be too true and with reference to the estimates for 1939-40, it was found that the existing liability of 45 lacs on 1st April, 1938, in regard to landlord fees would have to be met from the Provincial reserves. The difficulty of the whole problem is that these deposits are not provincial revenue in the ordinary sense for general purposes. Nor are the disbursements provincial expenditure which can be retrenched in times of emergency. And the resultant consequence is that after the

[6] *Vide* Para. 19 of the Report, and App. III, para. 2.

[7] *Vide* the Budget Speech, 1937-38, p. 9.

[8] *Vide* the Budget Speech, 1937-38, p. 9.

decentralisation of balances[9] has been effected according to Sir Otto, the provinces shall have "to husband their resources vis-a-vis this new responsibility with the usual caution expected of bankers."

Main characteristics of Bengal's sources of Revenue under Autonomy

It is within this financial structure, the Bengal Ministry began their administration. Before, however, any critical assessment of the financial policy and measures can be made, we must discuss the main characteristics of the sources of our revenue and the obligations of the Government to the people. Our province derives a little over 75% of the total revenue from only five heads: the share of Jute Export Duty, Land Revenue, Excise, Non-Judicial stamps and court fees.[10] Of these, the income from Jute duty and Non-judicial stamps depends almost entirely upon world conditions. Land revenue is inelastic, being based more or less on fixed demands. Excise revenue almost always responds to general economic conditions with considerable elasticity but its future as a revenue yielding source does not appear to be bright in view of changed outlook of life and temperance

[9]The effect of decentralisation of balances in the last four years is given here.

	Receipts	Disbursements	Net Result
1937—38	17,51,86,000	18,39,69,000	−87,83,000
1938—39	16,56,64,000	17,04,44,000	−47,80,000
1939—40 (Revised)	15,50,17,000	14,75,38,000	+74,79,000
1940—41 (Estimates)	13,11,64,000	13,40,57,000	−28,93,000

[10]

In crores	Total revenue	Jute export duty	Land revenue	Provincial Excise	Non-Judicial Stamp	Court-fees	Total from these hedas
1937—38 ...	13·00	2·38	3·53	1·55	·81	2·07	10·34
1938—39 ...	12·75	2·21	3·24	1·59	·76	1·82	9·62
1939—40 (Revised) ...	13·68	2·00	3·78	1·61	·83	1·81	10·03
1940—41 (Estimates)	13·90	2·20	3·68	1·61	·84	1·81	10·14

and prohibition movement. Court-fees in Bengal were really a very good source, and continued, till recently, to hold the second position next to land revenue. But due to the long depression since 1929, there has been a steady decline in litigation. Besides, legislations like Bengal Agricultural Debtors Act leading to the establishment of Debt conciliation Boards, have affected this source very materially. And it would be indiscreet on the part of the Bengal Chancellor if he depends much upon this source in future. It is true that Bengal enjoys a share of the taxes on income other than Corporation tax but this has not as yet reached even a crore.[11] There are receipts under Motor Vehicles Acts and it may be hoped that with the expansion of motor transport, these may soar high in future years. Here also the actual figures[12] belie our hopes. The provincial legislature has utilised its power to levy certain taxes and duties, but they have not as yet yielded much.[13] The very nature of these imposts is that they relate to general economic conditions and unless there is an all-round economic improvement, there is little hope of their contributing a decent sum to the Provincial Exchequer.

It is thus seen that Sir Otto's award may be somewhat better than the Meston's but it is not certainly in proportion to "the problems that loom very large in our national eco-

[11] In lakhs

1937–38	1938–39	(Revised) 1939–40	(Estimates) 1940–41
25·00	30·00	53·20	55·60

[12] In lakhs

1937–38	1938–39	(Revised) 1939–40	(Estimates) 1940–41
21·09	21·90	21·85	21·80

[13] In lacs

	1937–38	1938–39	1939–40 (Revised)	1940–41 (Estimates
Entertainment tax ...	17·42	18·40	18·20	18·20
Electricity duty ...	13·41	19·25	19·92	20·42
Tobacco duty (Sales Licensing) ..	3·37	1·30	Since abolished.	
Receipt, under Do. Bengal Finance Act, 1939	...	...	5·00	11·00

nomy today". While the entire responsibility for nation building rests on the provinces, the heads of revenue allotted to them are limited in their scope and inelastic in their nature. From the statistics, that have been quoted, it may be seen that apart from the potentialities of sales tax and taxes on agriiultural income which have not yet been explored, the existing measures have not yielded and are not likely to yield much. The observation of the Finance Minister, in this connection, is extremely interesting. He remarks that "the taxes mentioned in List II of the 7th schedule to the Government of India Act are not many. And it is out of their proceeds that the entire provincial administration, including District Boards and Municipalities etc., has to be financed. Inadequate as these resources are, there has unfortunately been a tendency to restrict the scope of even these taxes by a narrow interpretation of the terms. The proceedings before the Federal Court with regard to the interpretation of item 48 of List II, 'Taxes on the sale of goods' are still fresh in your memory and doubt has recently been raised as to the interpretation of item 46 of the List, 'Taxes on professions, trades, calling and employments.' It is contended that this tax does not allow graduation by classifying tax payers into blocks according to their incomes."[14]

Bengal's liabilities

It is true that with the inauguration of autonomy, the province started commercially on the 1st of April, 1937, with a clean slate and was free from debt. There were, in addition, the absence of any budgetary deficits and the receipts of some income to revenue on account of Sir Otto's award. But what about " the large accumulation of undischarged obligations to the people of this province" which the present Ministry must have to discharge if they call themselves the stewards of a "Peoples' government"?

Bengal is pre-eminently an agricultural province and her problems are mostly with reference to rural life. And

[14] *Vide* the Budget Speech, 1939-40, p. 34.

the schemes of naitonal reconstruction must relate to it. The gravest of the problem that needs to be immediately tackled relates to the relief of agricultural indebtedness with proper credit facilities for their long-term and short-term requirements. The incidence of land tenure also constitutes a hardship for the cultivator. Bengal's land system is highly complicated and extremely unsuited to the changing modern conditions, and nothing far-reaching can be accomplished unless there is a complete overhaul of the existing system. Then comes the absence of improved methods of production with better marketing facilities which will lead to greater holding power of the ryots.

Next to the agriculturists who form a very great majority of the population of this province, with practically no education, we have the middle-class people with good literary and academic equipment— a creation of the British administration everywhere in India, and more so in Bengal, due to Calcutta being, till recently, the centre of all their activities administrative, political, cultural and social. The so-called professions for which the academic nature of Bengal's education happens to be suitable, are now, for more reasons than one, overcrowded and the problem of educated middle-class unemployment has assumed a seriousness which no administrator can afford to ignore.

The third problem concerns improvement in irrigational facilities which are mainly necessary for Central and Western Bengal and partly for some districts of North Bengal. Expert opinion has pointed out that in most parts of Central and Western Bengal a continuous process of depopulation and deterioration of agriculture has set in. The history of the decay of these parts is a history of the decay of their rivers. The courses of rivers that materially contributed to the richness of the soil, health and wealth of the population have been deflected and most of them are today silted up, turning the neighbouring areas barren and uninhabitable. The other aspect of the same problem relates to the improvement of inland waterways especially in Eastern Bengal.

The fourth problem is for the expansion of the industrial activities in the province. It is admitted by all that the

scope of direct action by a Provincial Government is very limited, but state encouragement to various technical and research institutes will be a real help in opening out possibilities of extension of industries on a large scale. As to small and cottage industries, a Provincial Government can materially help in more than a thousand ways.

Public Health in Bengal is extremely unsatisfactory, and one of the causes of low yield of the province is due to the fact that her labourer can hardly put forth his best throughout the year and there is extensive loss of many thousands of man-hour per annum.

The last, of course though not the least, is the problem of how to spread primary education. It is an extremely interesting fact that Bengal which sent teachers for the last hundred years to spread education throughout the country, has miserably failed in educating her own agricultural masses. The percentage of literates in this respect is very low, and the spreading of primary education throughout the province must begin immediately.

To what extent the present Ministry have harnessed the resources to solve these problems?

It is generally admitted that the state has come into existence for the sake of life and continues its exsitence for the realisation of good life, It must not be forgotten that "the state has developed from the state as police man to the state as nurse, doctor, chemist, and benefactor, guide, philosopher, and friend from cradle to grave."[15] It is with regard to these latter functions, that there is the need of "nation building" departments of a government. Two decades have almost passed since we first heard about the "nation building departmens" under a popular government. The Montford Act was in operation for sixteen years and there was, during this long period, no sign of any planned scheme for the resuscitation of this province. The problems of Bengal, as noted above, appear today equally serious, if not more

[15] Sir Josiah Stamp, *Problems in Finance and Government*, p. 31.

than what they were in 1920. But we had during all these years, 'popular' ministers in charge of these departments. There is plenty of literature assessing the value of the stewardship of these 'popular' ministers under the Montford Act. Let us now examine how the present stewards have fared.

Here is a statement of the increase of expenditure during the last four years in our province.[16] There is no denying that people must be willing to bear some additional cost for the luxury of a representative democratic government. The expenditure on the Bengal Legislative Council was, in 1936-37, 1·51 lakhs. It has been estimated for 1940-41 to be 12·86 lacs.[17] Besides, a separate building for the Bengal Legislative Council may exceed 15 lakhs according to the present estimates. But these increases, are almost inevitable and we cannot grudge them. But, on the contrary, when we find that expenditure under the head "Direct Demands on Revenue" has increased disproportionately, we are forced to the conclusion that there is something wrong in the administration unless meticulous and careful analysis proves otherwise. Below is the table[18] showing more than 95% of

16

(in crors)	Revenue	Expenditure	Net result.
1937—38 ...	13·00	11·83	+1·17
1938—39 ...	12·77	12·77	− ·0001
1939—40 (Revised ...	14·03	14·17	− ·14
1940—41 (Estimates)	13·97	14·54	− ·57

17

(in lakhs)	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Expenditure on legislature	8·99	10·72	13·19	12·86

18

(in lakhs)	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Direct Demands on revenue ...	96·64	97·64	103·85	105·09
Revenue Account of Irrigation works, etc.	38·58	38·89	39·67	45·67
Debt Service ...	15·89	15·73	18·39	16·74
Civil Administration	792·22	827·80	873·02	894·76
Civil Works ...	120·01	128·69	146·31	159·72
Famine ...	·06	18·13	10·79	4·02
Superannuation ...	93·34	98·44	103·95	109·46
Stationery and printing	21·39	21·82	23·98	23·01
Miscellaneous ...	24·67	16·25	78·68	77·98
Extraordinary charges	...	...	7·03	12·61

the expenses of the Provincial Government and a detailed analysis of each item would reveal the real state of affairs.

From these figures, it will be seen that the total revenues of the Province have increased roughly from 13 to 14 crores during these four years, whereas the cost of collection has increased from 96·64 to 105·09 lakhs. Coming to details[19] we find that there have been increased under the items 'Provincial Excise', 'Registration' and 'Other Taxes and Duties under the head "Direct Demands on Revenue." We can follow in special cases, a ratable increase in cost of collection along with an increase in revenue, but when the income remains almost the same, no increase can be justified for cost of collection.

These figures speak for themselves and we have got no relief under the regime of Indian Ministers in an "autonomous" government. The same top-heavy administration is still being maintained. The increase in cost of collection under Taxes and Duties by exactly four times is absolutely unjustifiable. These taxes, it must be recalled here, were imposed to find money or nation-building departments from those people who can bear the levy without the least difficulty. But if the collection charges increase 400% while the income has increased 26% approximately, the future can better be imagined than described.

Next with regard to debt service, we find the increase to be normal, except for the year 1939-40. After the cancellation of all our debts under the Niemeyer award, debt services relate to (I) interest on ordinary rupee debt (*i.e.*, interest on temporary loan from the Reserve Bank whenever the balance falls below 25 lacs and discount on Treasury Bills) (II) interest on unfunded debt, *i.e.*, state Provident Funds and (III) interest on other miscellaneous obligations. Item

19 (In lakhs)

		1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Provincial Excise	Rev.	155·00	159·00	161·00	161·00
	Cost.	19·40	20·42	21·85	21·53
Registration	Rev.	22·86	24·12	27·00	25·00
	Cost.	18·87	20·69	24·55	24·64
Other Taxes & Duties	Rev.	39·18	38·94	43·10	49·60
	Cost.	·43	·32	1·29	1·72

(I) is only occasional and infrequent, while item (III) will be offset by transfer to other accounts such as irrigation and commuted value of pensions. Interest on state Provident Funds must increase as these Funds increase and almost the entire amount is charged. Of 18·39 lakhs for 1939-40, 2·39 lakhs represent discount on Treasury bills, and if this amount is deducted, as it should normally be, the debt service for this year will also record the normal increase.

Coming to Civil Administration we notice that there has been a substantial increase in expenditure (102·54 lakhs). This head includes not only the day-to-day administrative costs but also the various expenditure upon nation-building departments. A detailed analysis of the head is, therefore, necessary to arrive at a correct finding of the financial activities of the present Ministry. Of the various departments under this head, nation-building depends on Scientific, Education, Medical, Public Health, Agriculture, Veterinary, Co-operation, Industries and Debt Conciliation Departments. Simultaneously, expenses under the items, General Administration, Administration of Justice, Jails and Convicts Settlements, and Police should record the same as before, if not a definite decrease. If agriculture and industries improve, education and medical aid spread, the consequences should be reflected upon these items. It must be pointed out here that there must be real increase in expenditure on nation building otherwise there will be no progress nor any improvement of the province. It is possible to increase expenditure under "Medical" by appointment of a larger number of I.M.S.'s or increasing the emoluments of the members of the Bengal Medical Service. But that will not have any salutary effect on the people. On the contrary, establishing a hospital at every thana, nay at every village union, with a few indoor beds under the charge of a Doctor passed out of a medical school will give relief to the people and also find employment for the "bhodralog" unemployed licentiates.

Below is a detailed table of the expenditure on various items of this head.

(In lakhs)	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
General Administration	149·82	145·97	155·18	157·47
Administration of Justice	101·68	99·77	97·86	100·89
Jails and Convicts Settlements ...	40·78	34·26	35·21	35·83
Police	224·20	221·27	230·78	230·76
Total ...	516·48	501·27	519·03	524·95
Scientific Depts. ...	·39	·29	·30	·30
Education ...	126·04	144·28	154·65	156·52
Medical ...	52·87	55·96	55·56	58·15
Public Health ...	30·32	40·60	41·39	48·43
Agriculture ...	11·53	14·03	22·98	17·51
Veterinary ..	5·32	5·30	6·12	6·87
Cooperation ...	11·61	13·38	14·38	15·39
Industries ...	11·74	13·26	15·25	15·13
Debt Conciliation ...	Nil	13·15	17·50	23·12
Total ...	249·82	300·25	328·13	341·42

This table reveals the following facts: there has been a continuous increase in the cost of General Administration. This is absolutely unjustified. This has smashed all our hopes that provincial autonomy will bring great relief to the tax payers by reducing the administrative costs. With reference to a persistent demand of the Assembly for retrenchment the then Finance Minister observed that "true economy lies in so improving the machine itself that it will produce as good or better results on a smaller consumption of fuel and oil. This is what the present government are aiming at. . . . Strict economy must of course be our watchward in all the departments of the public service, for is not public money a trust to be administered with utmost care? But in scaling down salaries we must take care to see that the rival ideals of economy and efficiency are never in fatal conflict. This is no plea for perpetuation of too liberal

scales of pay."[20] The figures above, however, tell a different story. Besides, the proposals of the Geddes and Swan Committees have not yet been given effect to. Their recommendations seem to have been shelved.

Next with regard to expenditure for nation-building purposes, it is undoubtedly gratifying to note that the present Ministry have managed to increase it by about a crore of rupees during these four years. Coming to details, we notice that this increase is distributed on the following items in the following manner: 30·48 lakhs on Education, 5·28 on Medical, 18·11 on Public Health, 6·00 on Agriculture, 23·12 on Debt Conciliation, 1·55 on Veteirnary, 3·78 on Cooperation and 3·39 on Industries.

Of the additional increase of 30·48 lakhs spent on education, 6·14 lakhs[21] have been used for primary education. The Finance Minister declared that "the improvement of the human material is the foremost task before us. The remedy which readily suggests itself is the adoption of free and compulsory primary education."[22] But in actual action, he prefers other things to primary education. Everybody appreciates that higher education, especially University Education, is not possible without liberal state aid, but in a province like ours where elementary education is wanting so badly, no Chancellor should have spent Rs. 71,388 "to enable the Pardah College (in a city like Calcutta where there are so many girls' colleges)[23] to be started in a rental building, pending completion of its own building for which provision

[20] *Vide* the Budget Speech, 1938—39, pp. 32 and 35.

[21]

(In lakhs)	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Government Primary Education ...	·05	·05	·04	·05
Grants to Local Bodies	24·07	29·02	29·53	29·64
Direct Grants ...	3·17	3·17	3·63	3·66
Chittagong Hill Tracts	·24	·24	·23	·32
Total	27·53	32·48	33·43	33 67

[22] *Vide* the Budget Speech, 1937-38, p. 19.

[23] The clause within the brackets is mine.

has been made under Civil Works" for two lakhs, and another Rs. 40,000 for its further expansion. Besides, the sanction of 2½ lakhs to the Dacca University for the *additional* Muslim Hall, the grant of a lakh and thirty-five thousand to the Sadaat College, Karotia in the District of Mymensing, to enable it to complete its building projects," a grant of Rs. 21,000 "to extend the *dining hall* attached to the Muslim Hostel of the Dacca Intermediate College" and of other similar grants do not reflect any serious endeavour on the part of the Finance Minister and his collegues to spread primary education and thereby "improve the human material of the province."

The increase of 5·28 lakhs under Medical is due mainly to the provision of 2½ lakhe for the Chittaranjan Sevasadan and 2 lakhs and 65 thousands for grant to the Lady Dufferin Victoria Hospital, Calcutta. It also includes half a lakh for the establishment of new maternity and child-welfare centers in rural areas on a contributory basis", an annual grant of Rs. 10,000 to the Jadavpur Tuberculosis Hospital towards the upkeep of ten beds to be reserved for mufassal patients, and other sundry small grants. This distribution shows that the Ministers are in favour of the city people, who always enjoy the privilege of city's medical aids and provisions. Of an increased sum of 5·28 lakhs, the teeming millions of Bengal villagers get benefit of 60 thousands only. This certainly does not go towards "the betterment of the condition of the masses."[24]

The actual increase under Public Health amounts to 18·11 lakhs. Rural water supply, antimalarial and quinine grants, Kalazar and other epidemic charges, public health units in rural areas and sanitary and drainage schemes are undoubtedly the absolute requirements of our villages. Besides, washing of Jute in small 'dobas' has rendered the conditions of rural areas extremely unhealthy, and it is a sacred duty of the Chancellor of that exchequer which receives more than 2¼ crores annually from jute exports duty, to spend liberally for removing the evil effects of jute washing. The activities of the Ministry are directed

[24] *Vide* The Budget Spetch, 1937-38, p. 17.

towards the above needs and the distribution[25] appears to be wisely made.

Agriculture, the mainstay of the Bengalis, has been granted an increase of 6 lakhs only. We appreciate that the Imperial Council of Agricultural Research is doing real service to the country by initiating researches and other surveys that would go a long way towards the improvement of agricultural produce. But a pre-eminently agricultural province like Bengal cannot ignore her part in these directions. This little increase has practically been spent over the establishment of Agricultural Institutes at Daulatpur in the district of Khulna and at Dacca. The establishment of Union Board farms for demonstration of farming methods in villages, subsidies to grow remunerative crops recommended by the Agricultural Department and regulated markets for stimulating agricultural prices have attracted only a few thousands.[26]

Relief to the agriculturist debtors has attracted the serious attention of the present Ministry. But it is regret-

[25] (In lakhs)

Rural Water Supply	7·5
Free Distrbn. of Quinine	5·0
Antimalarial Schemes	2·5
Kalazar and other epidemic , ...	1·5
Subsidies to Water Works Improvement Schemes ...	·73
Other small Grants	·90
	18·13

[26] (In lakhs) ...	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Experiments farms...	1·88	2·07	2·21	2·90
Agricultural Demonstn. and Propaganda and Public Fairs.	·02	1·47	2·18	1·90
Agrl. Expmt. and Research.	·73	1·56	2·28	2·22
Agrl. Edn. ...	·83	·39	·18	1·60
Grants-in-aid contributions etc.	Nil	·86	·92	1·20

table that they have not looked at the problem of rural credit and indebtedness from a comprehensive point of view. Debt adjustment through Conciliation Boards is undoubtedly one of the few economic contrivances to meet the hopeless situation of the indebted cultivators. But this is only a palliative measure and almost inevitably fails if not accompanied by a sound scheme for finding finances for agriculture and other rural industries. Here in Bengal, of 8,35,476 cases disposed of till the 31st of December, 1939, awards were made for 2,97,788 cases for payment of Rs. 4,74,59,934 as against the creditors' claims of Rs. 1,49,53,935. And "during the following months another Rs. 51,37,90,000 of debts are expected to be tackled."[27]

It is neither the place nor the occasion to discuss the merits or otherwise of such a legislation as the B.A.D. Act, but it must be pointed out that the operation of this piece of legislation has created a panic among the village creditors with the result that rural finance has practically come to an end. Although the Finance Minister seems to take pride that an expenditure of 24·5 lakhs "will enable a board to function in almost every union in the Province and relief will thus be brought practically to the door of every villager,"[28] yet he feels that "the scaling down of debt is but an emergency measure which needs to be supplemented by some permanent schemes for meeting the normal requirements of agricultural credit."[29] And he thinks that "the expansion of cooperative credit organisation is considered in the present circumstances to be the readiest and most effective means of providing "these requirements."[30] This optimistic view of the Finance Minister about the effectiveness of cooperative movement is not supported by actual events of cooperation in our province.

Veterinary is equally important as agriculture, the improvement of which is materially dependent on the improvement of livestock. Rs. 10,000 have been provided for open-

[27] *Vide* The *Amrita Bazar Patrika,* dated 31.7.40.

[28] *Vide* The Budget Speech, 1938-39, p. 10.

[29] *Ibid,* p. 10.

[30] *Ibid,* p. 10.

ing a Dairy section at the Dacca farm. Half a lakh has been provided for the improvement of livestock by importing 300 Hariana bulls and 32 Hariana cows for the same farm, and the small sum of Rs. 5,000 for the supply of outfit boxes to Livestock and Assistant Livestock Officers. In addition to these, provision has also been made for additional staff for animal husbandry and for purpose of carrying out a census of cattle. These paltry sums for so important a subject are not expected of responsible ministers.

With regard to the present state of cooperative movement in the Province, the Finance Minister candidly admits that "the great problem of the cooperative credit Department is still the rehabilitation of the movement in the esteem of the people of the Province. For this purpose a scheme designed to bring the demands of the societies down to the level of the paying capacity of the debtors is under preparation."[31] But in the meanwhile, by way of patches, there have been small grants primarily for the reorganisation of the staff, the appointment of additional auditors, increased provision for cooperative training and a special sum of Rs. 28,500 to meet the cost of establishing five additional Land Mortgage Banks. But our view is that even this small amount of 3·78 lakhs spent on the cooperative movement, at this stage, is not well advised. This should have been kept in suspense or utilised for some other more pressing needs like primary education or improvement of livestock.

As to industrial development, the scope for direct action by provincial governments is very limited and we have to depend mainly on private enterprise. But the Provincial Government can appoint a standing committee for undertaking an expert enquiry into the possibilities of extension of industries on a large scale. Here the present Ministry have acted rightly in allotting Rs. 20,000 for the establishment of a Scientific Advisory Council "which will coordinate the results of the researches in the various technical and research institutes, suggest new lines of research and advise Government in regard to scientific schemes and proposals mooted by the institutes".

[31] *Vide* The Budget Speech, 1940-41, p. 15.

But there is a very great responsibility of a Provincial Government, especially in Bengal in view of her agricultural character, regarding the establishment, expansion and reorganisation of small and cottage industries. Besides, our Government must try its utmost for the supply of cheap electrical energy which might change the entire course of the industrial development of our province. Moreover, the existing industrial organisations need to be expanded and reorganised without any further delay and must be fitted with latest machineries. The Bengal Tanning Institute, the Government Weaving Institute at Serampore, the Silk Technological Institute at Berhampore must be immediately reorganised properly and a Jute Weaving Institute of the latest type should be forthwith established.

Over and above all these, there should be an Industrial and Commercial Museum to popularise the goods turned out by these industries, and a marketing and publicity board should be established for marketing facilities. It is really gratifying that the Ministry have made considerable progress in this direction and a good start[32] has been made, although much is yet to be done.

The two other heads of expenditure that require careful scrutiny are Civil Works and Famine. Under Civil Works, there has been an increase of about 39¾ lakhs, out of this, the largest increase has been due to an extensive

[32] (In thousands).

Sc. Advisory Council	20
Tanning Institute	25
Dye House at Serampore	63
Extn. of cotton weaving plant	18
Silk Techol. Institute	61
Model Jute Weaving"	4
Commercial Museum	50
Industrial Exhibition	20
Jute Weaving Plant	45
Marketing Officer	4
Other small Grants	29
	339

programme of building projects and of road development fund works. It is entirely an administrative proposition and it is rather difficult to give any opinion if new buildings for various departments are immediately necessary. The present Finance Minister observes that "in view of our straitened financial circumstances and of the rise in price of certain materials, expenditure on building is being limited to projects that cannot be postponed without serious administrative inconvenience."[33] But the enumeration[34] of the building projects does not convince the lay public who pay for all these of the immediate necessity of the projects below.

In regard to the increase under Road Fund Works, the case is different. It is well known that the development of roads and railways is greatly necessary to the welfare of the Province. The two sources[35] of income which are ear-

[33] *Vide* the Budget Speech, 1940-41, p. 18.

[34] (In lakhs).

Purdah College	2
Eden High School	2
New Reformatory School	2
A Civil Court Building at Howrah	2
Police Buildings	5·96
Electric Installation in Government Buildings ...	1·25
Construction of Witness Sheds	·75
Construction of work-shed at Dum Dum Jail	·85
Construction of Cooly Line at Botanic Garden ...	·27
Testing Station for Motor Vehicles at Calcutta ...	·48
	17·56

[35]

(In lakhs)	1937—38	1938—39	1939—40 (Revised)	1940—41 (Estimates)
Receipts under Motor Vehicles Acts ...	21·09	21·90	21·85	21·80
Less Compensation to Cal Corporation	−4·5	−4·5	−4·5	−4·5
Transfer from Central Road Development A/c	13·22	20·94	27·98	33·91
Total ..	29·81	38·34	45·43	51·21

marked for the development of road communications are "the Bengal Motor Vehicles Tax Act, the bulk of the proceeds of which (after deducting $4\frac{1}{2}$ lakhs payable to the Calcutta Corporation) is given to Municipalities and District Boards for their road schemes", and the Bengal share of the Central Petrol Fund.

It is a standing complaint of Finance Ministers that they could not execute any planned scheme for want of sufficient funds. But with regard to development of roads and waterways, that excuse does not stand. The government is literally overpowered with funds but they could not make use of them for want of proper schemes. Mr. Sarkar observes that "out of a total assignment of 1 crore 5 lakhs since the subventions were first received, the provincial expenditure up to the end of 1936-37 was only 62 lakhs or a little more than half. The unspent balance in hand on 1st April, 1937, was 43 lakhs out of which all but 10 lakhs will be spent by the end of the current year (1938)."[36]

With regard to river communications, the Bengal Government had the plan of setting up the Waterways Board contemplated by the Bengal Waterways Act of 1934. A provision of $2\frac{1}{2}$ lakhs was actually made, after five years, in the Budget for 1938-39. But even then it was unfortunately not found possible to constitute the Board, and it was hoped that it might be formed in 1939. But as yet this has not materialised.

The increase under Famine is mainly due to the terms of the Famine Insurance Act of 1937. This explains why the expenditure in 1938-39 shot up to more than 18 lakhs. Besides, there were in 1938-39 widespread floods in as many as 15 districts which also necessitated "considerable increase in expenditure on test relief and gratuitous relief and on account of the travelling allowance and contingencies of officers deputed to flood relief work." Bengal is a province where agriculture predominates and as such she is constantly at the mercy of the vagaries of nature. It is therefore

[36] *Vide* the Budget Speech, 1939—40, p. 20.

gratifying to find that the government are transferring substantial sums annually to the Famine Insurance Fund.[37]

Conclusion

The above is a rough sketch of what the present Ministers are doing with the resources they have been given under the autonomy. From a comparison of the revenues of Bengal during 16 years under Montford regime with those for four years under survey, we find that Bengal had, during those days, an average income of 10·38 crores, with a maximum of 11·95 crores in 1936-37 and 9·01 crores in 1931-32 when the ill effects of the great depression were completely reflected. Her average income is now 13·44 crores, that is to say, a little over 3 crores annually more under autonomy. Of this increased income, only a crore of rupees has been devoted to nation-building departments.

This is due to the absence of any planned scheme. We quite follow that in July, 1937, when the first budget was submitted, it was 'not possible to take up any elaborate schemes in respect of some of our grave economic problems',[38] because the Ministers had not the time, at their disposal for that careful and minute investigation, which is considered essential for undertaking the execution of such schemes. Mr. N. R. Sarkar gave us the assurance that, the implications of "a definite and comprehensive economic policy relating to our social and economic life" had to be clearly realised and the details fully worked out. But to our great disappointment we find that nothing has yet come out in this right direction. There have been renewals of certain old taxes, and a few new have been levied, and all these are

37	1937—38	1938—39	1939—40 (Rivised)	1940—41 (Estimates)
Gratuitous Relief ...	5,304	3,77,888	1,62,000	22,000
Miscellanceus ...	Nil	4,35,208	7,12,000	1,78,000
Transfer to Famine Insc Fund.	Nil	10,00,000	2,03,000	2,00,000
Salaries and Establishment.	765	100	2,000	2,000

38 *Vide* the Budget speech 1937—38, 14.

meant to "help the extension of the beneficent activities of the Government."[39] He referred to the three directions in which ameliorative measures are most urgent but at the same time very expensive. The first relates to Compulsory Primary Education, the second concerns improvement in Irrigational facilities and the third relates to the improvement of Inland Waterways.[40] But we have seen that he and his colleagues failed to form the Waterways Board during the last four years, and could not frame adequate schemes for road developments for utilising the subventions from the Government of India. He referred to the stupendous problem of middle-class unemployment but did nothing on a comprehensive plan except the appointment of an Employment Adviser. The Ministry had no scheme to enlarge the avenues of employment by undertaking public works on a larger scale. Nor had they the courage to give immediate and wholesale effect to the recommendations of the Swan and Geddes committees.

The truth is that no government can be of real service to the people if they do not follow a well thought out plan from the very beginning. Planning, clearly thought out, is a process that must always be pushed further. Weak and vascillating temperament cannot carry out a programme of this type. A wide outlook, a spirit of idealism, balanced judgment and independence of mind together with a strong faith and iron determination are the preliminary requisites of economic planning. What we want, at present, is a definite and comprehensive economic policy relating to our social and economic life. Its implications have to be clearly realised, its details should be fully worked out, all the items then should be incorporated in the Budget and complete execution must take place boldly and courageously. Nothing less than that would solve our problem.

SUMMARY

[This paper deals with the autonomy finance of the province of Bengal. The changes that have occurred in the financial posi-

[39] *Ibid*, p. 27.

[40] *Vide* the Budget Speech, 1937-38, p. 27.

tion and functions of the province are analysed and their effects are assessed. The important changes that are referred to are: (*a*) cancellation of debts to the Central Government, and (*b*) award of additional sources. Besides, the functional changes in connection with the scheme of decentralization of balances have been noted.

The effects of these changes on the finances of Bengal are pointed out to be encouraging and there has been an average increase of 3 crores in her income annually over the average income under the Montford regime. It is, however, observed that Sir Otto's Award may be somewhat better than Meston's but it is not certainly in proportion to the problems that loom very large in our provincial economy to-day.

It is urged that two decades have passed since we first heard about the "nation building" departments under a popular Government. During this long period no sign has been evident for the resuscitation of this province. The present Ministry have also not availed themslves fully of this additional income.

In conclusion, it has been pleaded to chalk out a definite and comprehensive economic policy relating to the social and economic life of this province and to put that policy boldly into execution. In the absence of such a well-thought out planned scheme, no Government can be of real service to the people. Only piecemeal patch works may be taken up to satisfy this or that political party which happens to be in power for the time being, but no far-reaching improvement nor any substantial progress of the province can ever be achieved without such a planning.]

PUBLIC EXPENDITURE IN MYSORE—A REVIEW[1]

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The Mysore State has been generally considered progressive in its administration as well as in its ideals, and, in fact, has often been spoken of as a model state. Such a compliment is especially deserved in the matter of our public finance and particularly with regard to our public expenditure policy and practice. We shall study our finances under the heads of security, social service, public undertakings and miscellaneous.

In India not merely the central government but also local authorities such as the District Boards, Municipalities and village panchayets look after public welfare and incur expendture; but, because of the incomplete and not easily available data relating to local authorities, we shall study and compare the public expenditure incurred by the state and provincial government only.

As all over the world, in Mysore also revenue and expenditure have been growing in the last few decades.

	Revenue	Revenue Expenditure	Capital Expenditure	Total
1881-82	106·5			117·8
1910-11	246·73	199·14	4·69	203·83
1920-21	313·13	327·85	110·92	438·17
1930-31	332·35	394·29	93·82	488·11
1937-38	395·54	394·55	70·12	464·67
1939-40	395·58	395·12	120·87	515·99

This increase is lragely accounted for by the progressive policy of the state. Hardly three dceades ago expen-

[1]In the preparation of this paper, I am indebted to Prof. V. L. D.'souza and Mr. B. R. Subba Rao for various suggestions and to my student Mr. G. Ramakrishna Reddy for some statistics.

diture on public undertakings was very limited and was almost confined to the hydro-electric scheme. Large amounts were not spent upon social service such as education and public health. But to-day there is hardly an important enterprise that is not either completely or considerably financed by the state. Iron and steel, porcelain, soap, sandal oil, cement and similar concerns are owned by the government while others like sugar, paper, textile, chemicals and fertilizers are largely dependent upon state capital. Moreover huge sums are being spent on such public undertakings as the Krishnaraja Sagar, Thippegondanahalli, Shimsha and Irwin canal projects. Finally, social service expenditure in the shape of education, medical relief and public health is many times more than it was thirty years ago. Thus the increase in expenditure is almost wholly real and not merely apparent.

The problem of defence expenditure is directly unimportant in our state. For, there is no possible external danger and even if there is to be one, protection is guaranteed by the British authorities. Our defence expenses, however, are of two kinds: the subsidy and the amount spent on the state forces. It is really doubtful whether the subsidy is a political tribute or a payment for protection. It was imposed in 1799 on the restoration of the Hindu dynasty as a payment to the British government for guaranteeing the defence and security of the state. The amount was 24½ lakhs of rupees till 1896, 35 lakhs till 1927, 24½ lakhs till 1938 and is 19·1 lakhs since. In this period of about one hundred and forty years Mysore has paid more than 77 crores in the form of the subsidy. The British government has recognised the inequity of this contribution and has agreed to abolish it as soon as its finances permit.

Mysore also spends on maintaining an army whose strength has been gradually reduced from 3000 men in 1910-11 to 1400 in 1937-38, and the expenditure is as below:—

1910-11	13·3 lakhs
1930-31	17·1 lakhs
1937-38	14·8 lakhs
1939-40	7·2 lakhs

Including the subsidy the total amount spent on defence was:—

	Amount	Proportion
1910-11	Rs. 48·5 lakhs	24%
1930-31	Rs. 41·6 lakhs	8%
1937-38	Rs. 33·9 lakhs	9%
1939-40	Rs. 26·3 lakhs	7%
		5%

Since a large part of these expenses consists of the subsidy over which the state has no control, these figures clearly show how little we spend on the wasteful and unproductive head of defence expenditure.

The other aspect of security expenditure is concerned with the means of ensuring internal peace, *viz.*, the police, courts and prisons.

	(Rs. lakhs) Expenditure on Courts	Police	Prisons	Total	Proportion of total expenditure
1910-11	7·5	9·4	1·2	18·1	9%
1930-31	11·5	19·3	1·0	31·8	8%
1937-38	11·5	19·7	1·2	32·4	8%
1939-40	12·2	21·6	1·2	34·8	8%

The number of courts has actually been reduced from 150 in 1910-11 to 110 in 1937-3. The strength of the police forces has shown little increase; but the increased expenses are due to reorganisation and better payment to the members so as to increase efficiency.

Another equally important item of expenditure is civil administration comprising General administration, pensions and allowances, muzrai institutions, and miscellaneous departments.

	Expenditure	Proportion of total expenditure
1910-11	25·3 lakhs	12·7%
1930-31	42·5 lakhs	10·8%
1937-38	49·9 lakhs	12·8%

While this expenditure is inevitable, Mysore spends on the administrative machinery very much less than even British India. For example, the expenditure on general administration in Mysore is little over a third of that in the neighbouring Madras and Bombay provinces:—

	Proportion of expenditure on general administration to total expenditure		
	Mysore	Bombay	Madras
1925-26	4 3	13·79	15·9
1930-31	4·1	13·81	15·5
1936-37	3·2	8·3	16·9

This result is largely traceable to the efficiency anl economy in administration in our state and especially to the complete Indianisation of the services and the comparatively low salaries.

Another allied item of expenditure is the cost of revenue collection including charges against mining revenue.

	Expenditure in lakhs	Proportion to Revenue	Expend
1910-11	32·4	13·6	15·6
1930-31	55·6	86·0	13·5
1937-38	49·6	12·0	12·0
1939-40	50·5	12·6	6·0

Mysore employs the most economical machinery for the collection of taxes. It has all along kept in view the maxim that the proceed sof a tax should not be absorbed by the agency for collecting it.

Two other necessary items of expenditure are the palace expenses and the interest charges.

The palace expenses are as follows:—

1930-31	26·1 lakhs	6·6%
1937-38	26·1 lakhs	6·6%
1939-40	26·1 lakhs	6·5%

The palace establishment forms an administrative unit. The expenses thereof are mainly a payment for a large number of public services. Some of the important items are estates and gardens, muzrai, parks, dispensary, sanskrit

colleges, certain educational institutions for boys—girls, charitable works, poor feeding and financial aid towards the encouragement of arts and learning. The palace establishment is run on the lines of a secretariat and the outlay is made in such a manner as to satisfy the canons of public finance.

The interest charges, whose net amount in 1937-38 was 42 lakhs of rupees, are to be paid on the public debt of our state amounting to about 15 crores. The growth in these charges is indicated below:—

	Net Interest	Proportion of expenditure
1920-21	11 lakhs	6·6%
1930-31	34 lakhs	13·5%
1937-38	42 lakhs	15·8%

Neither the debt nor the interest paid on it is really high or burdensome. For the debt per capita in our state is very little indeed:—

U.K. Rs. 2550	U.S.A. Rs. 840	U.S.S.R. Rs. 45
India Rs. 44		Mysore Rs. 23

Moreover, the whole of our debt is productive. The money borrowed has been invested in such schemes as the railways, hydro-electric and irrigation works and industrial concerns like the Bhadravati Iron and Steel Works, soap, sandal oil, soap factories, tec. No other country or province can claim this unique distinction of having a completely productive debt. Most of our investments are already yielding interest on capital and even profits and all of them will yield in the long run more income than expenditure.

The expenditure on the security and necessary items is not so distinguishing feature of our public finance as the large amount spent on social services. Under this head, we shall consider education, medical relief and public health. The spread of education has taken the leading place in the policy of the state:—

	Total	Proportion of total expenditure
1910-11	18 7	9%
1930-31	69·0	17%
1939-40	67·5	17%

This proportion to total expenditure may be compared with 15·5 and 13·5 in Madras and Bombay respectively. It may also be noted that a very large portion of the money spent on education in our state is derived from the government revenue and very little from fees:—

1936-37	Mysore	Madras	Bombay
Government funds	79·9%	45·7%	41·2%
Fees	8·1%	18·1%	24·4%
Miscellaneous	12·0%	36·2%	35·4%

The amount spent per student has risen in our state from 16½ rupees in 1910-11 to 19½ in 1937-38. All types of education from the university to the primary school are receiving increasing attention from the state. Primary education, however, is receiving particular consideration; the number of primary schools has increased from less than 2000 in 1910-11 to 6000 in 1937-38, i.e., in 1938 there was one school for every 1100 people but in 1911 there was one for every 2900. The amount spent on this very important branch of education rose from 3½ lakhs in 1910-11 to 23 lakhs in 1938. The benefit is indicated by the fact that in 1938 that 36·6% of children of school going age were attending schools as against 16·9% twentyseven years earlier. The state is also diversifying education and encouraging specially technical and professional education. It is also paying greater attention to increasing the efficiency of schools by better salaries to the teachers and greater facilities to the taught.

All the same, we have a long way to go to achieve our ideal of universal free primary education which is expected to cost about 60 lakhs of rupees a year. But for the present, the limited revenue of the state does not permit such expenditure.

As important as education is the protection of the people's health. The following was the amount spent on public health and medical relief:

	Amount Rs. lakhs	Proportion %
1910-11	7·2	3·6
1930-31	12·4	3·1
1937-38	18·2	4·6

As compared to 4·6 spent in Mysore, Madras and Bombay spent in 1937-38, 8·7 and 5·2% respectively. This does not show the true expenditure on health. The per capita amount is a better test. Thus we spent about 3 annas 2 pies per head as against 2 annas 7 pies and 3 annas 9 pies in Madras and Bombay. Although we spend less than Bombay, our distribution of the expenditure is wiser. Thus there is a hospital in our state for every 23,000 people as against 76,000 in Bombay and 40,000 in Madras. The result has been better health of the people.

	Mysore	Madras	Bombay
1921	14·2	20	26
1936	14·5	22	26

Another noteworthy feature of Mysore health expenditure is the increasing attention paid to rural health.

The striking feature of public spending in Mysore is the importance paid to economic development in maintaining government departments and in owning and aiding public undertakings of various types. The departmental expenditure on industries, agriculture, sericulture co-operation, etc., amounted to 13½ lakhs in 1937-38 as against 1½ in 1910-11. This sum is spent on agricultural and industrial research and on the improvement of implements and livestock, and on pioneering industries, and in establishing schools and workshops.

A more remarkable aspect of our policy is the vast amount spent on pubilc undertakings. In fact, the government has gone a long way in adopting a method of state socialism. Two types of modern enterprises are found in our state,those owned completely by the state and those considerably financed by it but in private hands. Of the first type are the following:—

		Capital invested up to end of 1937-38 in lakhs of Rs.
Hydro-electric and Irrigation works	...	794
Railways and Tramways ...	...	642
Industrial and other works ...	...	106
Iron and Steel and Cement ...	...	194
Miscellaneous (Soap, porcelain, tobacco etc.)		9·8

The importance of these enterprises in the economic development of the state and the magnitude of the investments need no emphasis. Some of these are key industries and other public utilities, but all of them are productive. A good number are already yielding large profits and in the long run all of them will add to the material prosperity of the country.

Of the other type, where the state contributes a part of the capital of private enterprises, the sugar facory and the capital of private enterprises, the sugar factory and the Krishnarajendra Mills are a few examples. The government has contributed 12 lakhs out of the capital of 20 lakhs in the case of the Mysore Sugar Co.

Yet another form of expenditure on economic development in Mysore is that of Public works such as irrigation, roads, and bridges. In addition to the capital expenditure of 253 lakhs between 1920 and 1927 the amount annually on public works is considerable:—

	Amount in Rs. lakhs		
1910-11	23·9	"	"
1930-31	42·61	"	"
1937-38	27·61	"	"
1939-40	29·9	"	"

All these items add to social welfare. Irrigation facilities increase agricultural prosperity, while better communication not only facilitates exchange of goods but also enlightens the villages by bringing the rural and urban parts closer. Civil buildings are as useful as they appeal to the aesthetic side of life.

This review of public expenditure in Mysore brings out three important facts; firstly, that the expenditure on social services and on material development is enormous and in fact is the outstanding feature of our public finance; secondly, that this trait is increasing in importance; and lastly, that the little spent on the security services is largely inevitable. The real test of public spending however is not the aggregate amount but the per capita sum checked by the dirce-

tion and distribution of expenditure and by the tax system. We might now apply these tests:

	Rs.	a.	p.
Mysore (Revenue expenditure Rs. 6-1-3, Capital 1-13-7)	7	14	10
Madras	3	10	10
Bombay	7	7	0
All Indian provinces	3	3	5

It is clear that Mysore has a long lead and it spends per capita twice as much as the British Indian provinces.

	Mysore			Madras			All provinces			Bombay		
Security Services ...	2	7	7	1	4	5	1	2	0	1	11	3
Social Services ...	1	0	6	0	14	0	0	11	3	1	9	7
Material development etc.	4	6	9	1	8	4	1	6	2	4	3	0

It is again evident that Mysore leads Indian provinces.[2]

Data are insufficient to judge the distribution of expenditure either in Mysore or in other parts of India.

The fourth criterion is that of taxation. The soundness of a tax system must be judged from three standpoints. (1) The proportion of direct to indirect taxes. Generally direct taxes are less regressive and therefore a system with more of direct taxation may be regarded as more equitable. (2) The application of progression specially in relation to the exemptions and the rate of progression. Where the minimum exempted is in keeping with the environment and where the tax gradient is steep, we may be said to have a good system. (3) The types of direct and indirect taxes prevailing. Thus poll taxes and property taxes are also direct taxes but are less desirable than income taxes and death duties. Again indirect taxation of luxuries like wines, precious stones, costly furniture and intoxicants is certainly preferable to taxation of necessaries like salt and food stuffs.

[2] The large security expenditure in our state includes the subsidy, the army and similar items which together amount to about one rupee per head.

Judged from these viewpoints, our tax system is inferior to none in our country:

	Total Revenue Rs. in lakhs	Percentage of Revenue		Percentage of tax rev.	
		Non-tax	Tax	Direct	Indirect
Mysore	395·5	39·1	60·8	37·2	23·6
Madras	1558	27·0	73	30·1	43·9
India (Provinces only)	9233	30·4	69·6	34·3	35·3

Mysore gets a considerable portion of her revenue without resorting to taxation. In her tax system the direct taxes predominate. Applying the second criterion, we find the progressive principle is applied largely to the income-tax only and even here the pogression is not very steep. Further, the exemption limit, *viz.*, Rs. 2.400 is commendably higher than in British India, and also in England where the standard of living is very much higher than in our state. As in India, our most important direct tax is the land revenue where neither the principle of progression nor that of exempton is applied. This makes the tax regressive and burdensome. But these defects are found in all the provisions and they are not peculiar to our state. From the third point of view, our indirect taxes are mostly excises, particularly on intoxicants. These are very desirable taxes, especially in these days of prohibition. The two important direct taxes are land revenue and the income-tax. The latter is likely to increase in importance, though some improvements in the land tax are possible. Judged by these various tests, Mysore's public expenditure is at least as good as that of any other part of British India and in many respects much better. And with some modifications it would become ideal. These improvements are in the direction of social expenditure especially in poor and unemployment relief, old age pensions, and the schemes of social insurance. The growth in our social expenditure clearly shows that this is already the aim of the state. But limited resources are hampering our advance. It may be hoped that when all our public enterprises begin to pay and when our wealth and therefore

taxable capacity increases we shall have enough funds to spend in all desirable directions.

SUMMARY

[There have been changes both in the quantity and character of Public Expenditure in Mysore over the last forty years, and a corresponding development has taken place in the Public Income of the State. New taxes have been introduced from time to time and there has been a remarkable increase in non-tax income, specially in recent years. Recent industrial policy of the Government has the merit of adding to Public Income, directly and indirectly, and broadening the base of taxation.

The structure and character of the tax system are analysed and the more important taxes, such as Land Revenue and Excise on Liquor and Drugs are critically examined. The need and scope for alteration or improvement of the tax scheme are discussed with reference to incidence of taxation and additional revenue. The scope for additional Public Income is, demonstrably, not without limit and the need, therefore, is urgent for a relief from imperial burdens.]

THE "DEPRESSION FINANCE" OF THE BOMBAY GOVERNMENT

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I

The period intervening between the end of the last war and the beginning of the present constitutes a complete cycle of economic activity, exhibiting the phases of expansion, crisis, depression and recovery. After the disorganization of economic life caused by the last war, production, trade and employment recovered with amazing rapidity. Thus, during 1921 to 1929, almost every country recorded a higher level of productive activity and employment. The succeeding five years constitute the period of crisis and depression. Roughly speaking, since 1934 world economic conditions have been improving, though there was a slight recession in 1937.

In our own country the cycle of economic activity has been in close correspondence with the world conditions. Here, the war boom reached its peak in 1921, after which, in the picturesque phraseology of Professor Kale, "the sky became suddenly overcast . . . the financial situation was covered with a thick gloom, and the vision of sunny days vanished like a pleasant dream."[1] The business conditions, however, recovered after two or three years; up to 1929 there was progress, though the rate was rather slow. The depression affected the Indian economic life during the subsequent five or six years. Production and trade showed signs of revival after 1935; the gradual recovery has lasted to this day with a slight setback in 1937.

[1] V. G. Kale, *India's National Finance*, 1921, p. 8.

The repercussions of the cyclical movement of prices, production and employment on Public Finance are an interesting study. In particular, the financial readjustments which are necessitated during a depression period call for careful analysis in order that the correct remedial measures may be adopted in time. During the last depression the finances of almost every country were thrown into diequilibrium. The yield of income taxes, customs duties, and the profits of State commercial enterprizes fell by 10 to 30 per cent in different countries, in spite of the increased rates made applicable.[2] Public expenditure, which is necessarily more rigid and inelastic, did not decline in similar proportions, and the result was "unbalanced budgets" all round. Various measures were adopted to restore budget equilibrium: tax rates were raised and new imposts (*e.g.*, crisis taxes) were levied; that part of public expenditure which was somewhat elastic (e.g., that on social services) was subjected to ruthless retrenchment. These measures, adopted in the interest of budget equilibrium, imposed a heavy strain upon economic life, which was already suffering from the ravages of the depression. The question, therefore, was asked; Should we sacrifice so much for the ideal of budget equilibrium? Is it not better to tolerate (and even approve) budget deficits during a depression?

II

In what follows an attempt is made to study the "depression" phase of Bombay's finance. It is well-known that Bombay's financial development during the last twenty years has gone through three phases: First, the phase of steady growth in expenditure during the years 1921 to 1929; second, the depression phase, commencing from the year 1930-31 and lasting up to 1933-34. Since 1934 the general economic conditions begin to show improvement, though

[2]For details see the following:—

(1) League of Nations; *Public Finance* (1929—35).

(2) Dalton (Editor), *Unbalanced Budgets.*

deficit budgetting continued for two years more. We may regard the period since 1934 as one of gradual recovery, though some might date recovery a bit later.

The study of the depression period is divided in two parts: The first contains a narrative of budgetary adjustment; the second gives a general review of the financial problems and the measures taken.

III

Budgetary Adjustments during the depression.

When, in February 1930, the Hon. Sir G. B. Pradhan presented the budget estimates for the year 1930-31, he could show a balance between revenues and expenditure. In the course of the year, however, his estimates were vitiated by the fall of prices and production, so that the actual results of the financial year 1930-31 showed a deficit of no less than 179 lakhs. This was due to the decline of revenue under the following heads: Land Revenue (38); Excise (85); Forests (26); Stamps (15); Irrigation (35).

The outlook for 1931-32 was far from bright. The economic depression was deepening and its disastrous consequences were being accentuated by the Civil Disobedience Movement. The budget estimates of the year were: Revenue, 1524 lakhs; Expenditure, 1589 lakhs. The revenue figure was inclusive of 39 lakhs representing Bombay's share of the Petrol Tax, and some 33 lakhs on account of the additional taxation for which legislative sanction was to be sought. On the expenditure side the Finance Member announced a cut of Rs. 39 lakhs, which was principally borne by Education (9) and Civil Works (12). In the course of the budget debate the Government promised to appoint a Retrenchment Committee in accordance with the wishes of the Legislative Council. The Committee was duly appointed with Sir Rustom Vakil as President.

The Budget and the Finance Bill of 1932-33 are highly characteristic of "Depression Finance." Revenue was estimated at 1435 lakhs, and expenditure at 1508 lakhs. The deficit was in spite of large reductions effected upon the recommendations of the Retrenchment Committee. They

chiefly affected Education, Civil Works and the pay of the Government servants, which was subjected to a cut of 10 per cent. Despite these reductions the Government had to propose fresh taxation in a variety of forms. This year all the new tax proposals were embodied in a single Finance Bill—an improved procedure copied from the Central Assembly and the British Parliament. The proposals will be dealt with later.

The budget of 1933-34 presented by Sir Gulam Hussain Hidayatulla showed a deficit of Rs. 50 lakhs, in spite of the expenditure reductions to the tune of 28 lakhs. The Finance Act of 1932 was renewed; in addition, a duty on the Sale of Tobacco in the Presidency (other than that of Bombay) was imposed; further, following the recommendations of the Reorganization Committee, toll-bars were re-imposed at certain places on the provincial roads.

IV

General Review of "Depression Finance"

The following table brings out the decline of revenue during the period as compared with that of 1929-30, the last 'normal' year.

Ordinary Revenue[3] (*In Rs. lakhs*).

Heads of Revenue	1929-30	1930-31	1931-32	1932-33	1933-34
Lands Revenue ...	381·8	385·2	396·9	374·2	384·2
Excise	402·2	297·4	321·2	329·8	243·2
Stamps	177·2	158·1	150·3	158·8	156·4
Forest	79·8	52·2	56·7	59·7	54·3
Registration ...	12·3	10·9	11·4	12·5	16·2
Scheduled Taxes ..	20·1	16·4	19·2	18·8	19·1
The rest including Irrigation, Administrative Receipts, etc.	261·3	220·1	252·9	279·0	240·7
Total ..	1332.7	1130·3	1200·6	1202·8	1214·5

[3] The figures in this table are taken from the budget of the Bombay Government for 1935-36. They are the actuals of the years calculated after making some adjustments in accounting. In particular, mention must be made of the omission of the book-entry "Assessment of alienated lands minus quit rents"; this omission has reduced the Land Revenue figure by about 97 lakhs.

The following observations might be made with reference to the trend of revenues under specific heads:—

(1) Firstly, it is to be observed that the Land-Revenue has been considerably steady. The rigidity of this revenue in the face of the enormous decline in agricultural prices and the farmers' incomes, is a matter of grave concern to all those who are interested in the welfare of the rural population. The Government granted suspensions and remissions on a large scale during the years 1930—34. The following figures were given by Sir D. Cooper in his Budget speech in 1935.

Year	Suspensions (In thousands of Rupees)	Remissions
1930-31	53,79	49,77
1931-32	58,26	27,65
1932 33	53,29	39,71
1933-34	33,40	72,00
Total	198,74	189,13

Now, if the average annual amounts of suspensions and remissions were 50 and 48 lakhs respectively, how is it that the Land Revenue shows hardly any decline over the figures of 1929?

(2) The Excise revenue has declined by something like 60 lakhs. This represents an accentuation of the continuous decline since 1925. A part of the decline is to be attributed to the continued policy in the direction of prohibition; the anti-drink campaign of the Congress was also responsible for it in a certain measure; chiefly however, it was due to the fall of purchasing power of the people.

(3) Stamp Revenue, which is highly responsive to general economic conditions, declined by about 20 lakhs, inspite of the higher rates made applicable, and the extension of the Transfer of Property Duty to Poona, Ahmedabad and Karachi, provided in the Finance Act of 1932.

(4) The revenue from Forests went down by about 25 lakhs, obviously due to the fall of prices of forest-produce.

The large decline of revenue under the foregoing heads necessitated measures of additional taxation on the one hand

and retrenchment on the other. The two categories of measures are treated below.

V

Measures to obtain additional Revenue.

1930-31: (1) The Government increased the Motor registration and license fees which they had been collecting under the rule-making powers of the Indian Motor Vehicles Act. This brought in an additional revenue of some 10 to 11 lakhs a year. A few years later, Government's powers in regard to the levy of such fees were questioned, and the Government had to legalise the procedure by means of an amendment to the Indian Vehicles Act.

(2) In the same year the Government amplified the Bombay Betting Tax (1925) and introduced the so-called "Bookies' Tax."

1931-32: The Government renewed the old Stamp Act and the Court Fees Act, and proposed an interesting measure the *Succession Duty Bill*, for the taxation of inheritance. This Bill, introduced by Sir G. Pradhan, was in contemplation ever since 1923. The present Bill was based upon the principles accepted by all eminent economists and by the Taxation Inquiry Committee. It did not aim at taxing the whole corpus of the estate, but only the share accruing to the individual recipient: it was thus not an estate duty but a succession duty. Provision was made for reduction of rates according to consanguinity, and in regard to "quick succession." The Bill, however, failed to pass through the Council, where it was opposed by Mr. Kamat in a well-argued speech.

1932-33: The Finance Act of 1932 contained the following measures:—

(1) The Electricity Duty: Under this provision was made for the levy of a surcharge on the consumption of electrical energy for lights and fans to be collected from the supplier. Exemptions were granted to Government industries, tramway companies, Railways, local authorities, and hospitals, and to consumers of less than 12 units a month. The revenue from this measure was estimated at 12 lakhs, but the actual

yield during the subsequent years was in the neighbourhood of 9 lakhs.

(2) Secondly provision was made for the enhancement of the fees leviable under the Indian Court Fees (Bombay Amendment) Act.

(3) Provision was also made to raise the Stamp Duty on the Transfer of Property to Poona, Ahmedabad and Karachi. The proposal to impose a stamp duty on forward transaction in the commodity markets and in the Stock Exchange was, however, abandoned in view of administrative difficulties.

The aggregate yield of all the measures contained in the Finance Act could not have been more than 15 lakhs. It could not, therefore, materially meet the difficulties which the huge deficits had been causing since 1930-31. In the next budget session, therefore, the Government, besides renewing the Finance Act, passed two additional measures for increasing revenue. They were:—

(i) The Bombay (District) Tobacco Act, under which a license fee for the sale of tobacco in the Presidency (other than the city of Bombay) was imposed. The yield of the duty for the subsequent two years was about 5 lakhs of rupees.

(ii) The second head under which additional revenue was obtained was the Tolls. It will be recalled that in 1908 the Government of Bombay had declared that the policy of gradually abolishing tolls on provincial roads was to be adopted. During the next few years this policy was pursued with such thoroughness that all tolls on provincial roads were abolished. In 1922, however, some of the tolls were re-imposed for the purpose of road maintenance. In 1932 the Thomas Committee recommended an extension of the Toll system, and the Government acting upon this recommendation, reimposed some more tolls on provincial roads in 1933. This measure yielded an additional sum of 7 to 8 lakhs of rupees for the next three years.

The toll system was unpopular from the very beginning. In a country like ours where transport facilities in the rural areas are ill-developed, tolls are bound to have very

adverse economic effects. Though there were no materials for studying the incidence of the tolls, experienced persons believed that they fell more heavily upon the poor peasantry than upon the city dweller going in his private car. The auction system, again, which was adopted for the collection of tolls gave rise to grave abuses[4] It would seem that the Government rarely realised the objectionable character of this impost; they convened a conference in October 1933 to discuss the possibility of substituting the tolls by some well-thought out system of Motor Taxation. The latter, however, had to wait for two years till it was ready for adoption.

The total additional taxation in 1933-34 over the taxation of 1929-30 can be estimated as under:

1.	Motor Registration Fees	...	Rs.	10 lakhs.
2.	Tolls	...	,,	7 ,,
3.	Electricity Duty ...	...	,,	9 ,,
4.	Bookies' Tax ...	...	,,	$1\frac{1}{2}$,,
5.	Enhanced Court fees ..	...	,,	3 ,,
6.	Enhanced Stamp Duties	...	,,	$1\frac{1}{2}$,,
7.	Tobacco Duty ...	...	,,	5 ,,
			Rs.	37 lakhs.

Though a good deal of the burden of this additional revenue fell upon the town-dweller, it must not be supposed that the agriculturists' burden in the depression was lowered. We have already drawn attention to the increased burden of land revenue due to the decline of agricultural prices and incomes. Though the exact amount of the burden is not calculable, there is reason to believe that it was extremely heavy.

VI

Retrenchment.

The additional revenue derived from the taxation measures given above was obviously inadequate for making

[4] See the informative speech of Mr. J. B. Greaves (Bombay Chamber of Commerce) in the Bombay Legislative Council. Vol. 39, p. 833-34.

good the loss on account of the old sources. The Government, therefore, had to resort to retrenchment for attaining budget equilibrium.

The retrenchment programme commenced in the very first year of the depression. We have already referred to the cut of Rs. 39 lakhs announced in 1931-32, which fell mainly on Civil Works, Education, and Public Health and Medical Departments. At the same time the Government announced their intention of appointing a Retrenchment Committee to go into the question more fully. The Committee was appointed shortly after the budget session and it produced an *ad interim* report in July 1932. In this, some immediately realizable economies to the tune of 60 lakhs were suggested. The Committee also held that the salaries of Government servants "from top to bottom must be dealt with simultaneously in the interests of equity, and that statutory difficulties, if any, in the way of doing this must be left to the authorities to deal with." The final report of the Committee came out in November. It embodied the Committee's proposals of permanent retrenchment and of the reorganization of Governmental activity in general. The report bore on its face the obvious marks of haste. When, therefore, the Committee said that it was "incomplete," there was more truth than modesty in it.

The Government put many of the Committee's suggestions into effect, and took some drastic measures independently. In an official publication called "The Financial Position of the Government of Bombay," we get the following statement relating to reductions of expenditure.

1.	Recommendations made in the *ad interim* report of the Retrenchment Committee	Rs. 61 lakhs
2.	Recommendations made in the final report of the Retrenchment Committee	Rs. 57 lakhs
3.	Action taken independently by Government	Rs. 40 lakhs
		158 lakhs

In the budget speech for 1932-33, however, the total figure was stated as 137 lakhs, which was distributed as follows:—Irrigation (16), Civil Works (31), General Administration (19), Education (27), etc. Hence it must be mentioned that the Government had succeeded at effecting a cut of 10 per cent in the salaries of satutory servants.

It is not possible for a non-official investigator to say what part of the retrenchment was permanent and what temporary. It is obvious, however, that the reduction of salaries, and the cut in the Education grants was to be temporary. The Thomas Committee calculated that permanent retrenchment amounted only to 32 lakhs.

In spite of these reductions of expenditure and proposals of fresh taxation, the budget of 1932-33 showed a large deficit. It appeared, therefore, that nothing short of a complete reorganization of the machinery of Government would restore budget-equilibrium. In July, 1932 a committee was appointed for this purpose, with Mr. G. A. Thomas as its Chairman. The terms of reference for the Reorganization Committee were very wide. They were asked not to be satisfied with "mere pruning expenditure here and there"; rather, their task was to effect economy as a result of a general readjustment of the machinery of Government.

The Thomas Committee addressed itself to this task in a most thorough-going manner. Its proposals regarding the reorganisation of Government and retrenchment were estimated to produce a financial betterment of nearly two crores. The Government of Bombay however, pointed out that "only a small part of the two crores can be produced at the volition of this Government." In the official publication "The Financial Position of the Government of Bombay" (1933) the betterment of two crores was analysed as under: (a) Savings on pay and pensions, 82 lakhs. (b) Savings dependent upon the sanction of the Secretary of State or the Government of India, 20 lakhs. (c) Savings dependent upon the efforts of the local bodies, 38 lakhs. (d) Betterment which it is within the power of the local Government and legislature to secure in the near future, 60 lakhs.

The principal item under (a) was the large saving expected as a result of the introduction of the revised scales of pay for provincial and subordinate services. Savings under (c) were due to the Committee's proposal to reduce grants to local bodies and municipalities. They were expected to increase their own income through additional taxation. The betterment of 60 lakhs under (d) consisted of new revenue (20) and retrenchment (40). The former was due to the proposals of increasing registration fees, re-introduction of one-anna stamp duty on cheques, and imposition of additional tolls. The reduction of 40 was to be secured by cutting down travelling, house rent and other allowances, the transfer of Government secondary schools to non-official management, the closure of Agricultural and Veterinary Colleges and the School of Arts etc.

Space does not permit us to examine the foregoing proposals in detail. Besides, many of the Committee's proposals involve considerations of an administrative character which this is not the place to discuss. We, however, wish to stress one point—that throughout the report there runs the orthodox belief that the budget must be balanced at all costs. The report takes no cognisance of the effects, both immediate and remote, of the drastic retrenchment on economic life in general. In one respect, however, the Committee deserves the gratitude of the Bombay Public, and that is in regard to its pronouncement on the subject of the salaries of public servants. The Committee recognised that the provincial scales were unduly inflated by those of the All-India Services, and it proposed some drastic reductions in salaries, pensions and allowances for the former.

VII.

The foregoing study of the effects of the depression on Bombay's finances, and the measures taken by the Government such as additional taxation and retrenchment, is suggestive of certain general considerations bearing on the problem of budgetting. The general problem of budgetting is two-fold: first, it is a problem of attaining long period adjustment between revenue and expenditure in such a wise

that an 'optimum' scheme of finance, such as would maximise welfare, is attained. This raises the question of adjusting the tax and expenditure schemes upon the basis of the principles of least sacrifice and maximum benefit respectively. The short period problem of budgetting, on the other hand, is one of making rapid readjustments in the tax and expenditure schemes in response to price and income fluctuations caused by the trade cycle. Now, if an attempt is made to bring about budget equilibrium during a depression, the economy is subjected to heavy strain on account of additional taxation and retrenchment. Accepted theory of the Trade Cycle suggests, on the other hand, that in times of depression, the Government should stimulate effective demand by giving tax-relief, and by launching schemes of capital expenditure. This means that during years of falling prices and income, the Government should tolerate budget deficits, which should be wiped out by accumulating surplus in times of prosperity. This leads to the expedient of a trade cycle budgetary programme.

Now, if we examine Bombay's financial adjustments in the depression we will notice that here, strenuous efforts were made to attain budgetary equilibrium by additional taxation and ruthless retrenchment. Some of the tax measures were definitely objectionable, and so were some aspects of retrenchment. We do not wish to pursue the detailed criticism here. We only wish to raise the general question: Should such drastic measures be taken in the interest of budget equilibrium during a depression period? Should we sacrifice so much for the ideal of a balanced budget?

My own views on the subject are as follows:—

(1) I believe that the Bombay Government should concern itself more with the long term than with the short-term problem of budgetting. For instance it should try to readjust the tax structure as to make it more progressive in its incidence. This will necessitate a large reduction of land-revenue and the imposition of such taxes as that on the higher agricultural income, it also needs a turn in the direction of giving greater benefit to the poorer sections of the community. Though this subject cannot be dealt with in

detail, one observation must be made: It is that the expenditure on salaries is still considerably higher than what we can afford. This problem cannot be solved by temporary cuts such as made applicable during the last depression.

(2) The short-term problem of budget equilibrium ought not to lead to such drastic measures as were adopted some time back. On a rough estimate we may say that during a depression as severe as the last, Bombay's permanent revenues would go down by nearly a crore and a half. Nearly a fourth part of this may be met by retrenchment. The rest may be allowed to lead to deficits which would accumulate, let us say, to about four crores in four depression years. Now this could be wiped out by surplus budgetting in the recovery or the expansion period. Perhaps it may be more useful to build up during a prosperous period what may be called Depression Fund, which may be utilised for meeting deficits and for inaugurating schemes of expansion in the depression period. This will obviate the necessity of imposing heavy strain upon the economy by retrenchment and additional taxation during a depression.

SUMMARY

[The world's economic depression (1929—34) affected the public finances of all countries in a most adverse manner. Most countries adopted drastic methods of retrenchment and taxation to make good the decline of revenue during the period. Despite these, however, "unbalanced" budgets were the order of the day.

Bombay's financial development during the years 1921—1939 falls into three stages: (1) moderate expansion during 1921—29, (2) rapid decline during 1930—1934, (3) recovery since 1935.

An account of budgetary adjustments during 1930—34 is given in order to indicate the effects of the depression.

Some observations are made on the decline of revenue during the period. Measures of additional taxation during the period are discussed. It is pointed out that these methods could not have contributed much towards the balancing of the budget.

Retrenchment effected during the period upon the recommendations of the Vakil Committee and Thomas Committee are set forth.

A plea is made that Bombay (and other provinces) should provide against future depressions by establishing a "Depression Fund." This should be built up during prosperous years by surplus budgetting and utilised during depression for obviating drastic methods of retrenchment and additional taxation.]

NON-TAX REVENUE OF MYSORE

BY

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The public revenue of Mysore for the year 1940-41 has been estimated at Rs. 439·06 lakhs. During the past decade the revenue of the State has increased by more than Rs. 100 lakhs as per the following table indicating its growth:

Year		Revenue in lakhs of Rs
1930-31	...	332·35
1932-33	...	338·28
1934-35	...	367·66
1936-37	...	400·25
1938-39	...	398·28
1940-41	...	439·06
(Estimate)	...	

Mysore, draws its revenue partly from tax and partly from non-tax sources. For purposes of study, the following is the arrangement of the classification adopted:

Tax Revenue—comprising the following heads of revenue: (*a*) Land Revenue excepting the receipts shown under the head "Miscellaneous;" (*b*) Excise; (*c*) Income-Tax; (*l*) Doty on gold; (*e*) Miscellaneous Taxes; (*f*) Stamps; and (*g*)Registration.

Non-tax Revenue—

I. Derived from natural sources, *i.e.*, the public domain:

(*a*) Proceeds of the sale of governmental lands and other sundry items of revenue such as grazing rights and minor tree produce, shown in the budget under the head—"Land Revenue —Miscellaneous";

(*b*) Forest revenue:

(1) from sandalwood and sandalwood oil;

(2) from other sources;

(*c*) Mining revenue.

II. Revenue accruing to the State in its capacity as trader:

(*a*) from the hydro-electric and irrigation works;

(*b*) from the railways;

(*c*) from the other industrial undertakings of a productive nature.

III. Revenue from other sources:

(*a*) Interest on government investments and dividends received from joint stock companies;

(*b*) Surplus revenue of the Assigned Tract;

(*c*) Departmental receipts.

As in other countries, in Mysore also, the growth of expenditure has been a feature of its public finance in the last few decades. Since 1881, state activities involving both an intensive and an extensive increase of governmental functions are in evidence. New duties are being constantly undertaken while the old ones are as constantly being performed more efficiently. The developmental functions of the State have engaged the constant and careful attention

of the Government. The following table indicates the increasing proportion of the revenue expenditure on developmental functions since 1881:—

Revenue Expenditure of Mysore (In Rs. lakhs)

Year	Total Revenue Expenditure	Expenditure on Development functions[1]			
		Material and Moral Development	Medical aid and Pub. Health	Total	Percentage of total expenditure
	Rs.	Rs.	Rs.	Rs.	
1881-82	119·33	1·35	1·45	2·80	2 3
1891-92	170·75	4·33	2·56	6·89	4·0
1901-02	214·61	6·99	4·88	11·87	5·5
1911-12	232·01	10·72	6·86	17·56	7·5
1921-22	312·05	52·97	11·46	64·43	20·6
1931-32	337·47	61·86	14·00	75·86	22·5
1940-41 (Estimate)	413·06[2]	74·70	19·51	94·21	22·8

During the period of the past sixty years the total revenue expenditure of the State has increased very nearly three and one half times; and the expenditure on the beneficent services has increased nearly thirtyfour times. The proportion of expenditure on these activities to total expenditure also indicates a steady rise.

[1] Under Material and Moral Development are included the expenditure pertaining to the Departments of Education, Agriculture including Veterinary, Industries and Commerce and Cooperation. The expenditure on Medical Aid and Public Health is shown under 'Protection' in the budget.

[2] Excludes the provision of a contribution of a sum of Rs. 26 lakhs allotted to the different development funds.

In the management of its finances Mysore has been aiming at the successful promotion of "the twin ideals that every democratic government must set before itself, *viz.*, social justice and individual freedom."[3] Eypenditure is wisely distributed and as a rule it has been possible to maintain the budget equilibrium. A courageous and a consistent policy has been pursued in regard to the manifold nation-building activities and there has not been any hesitation to embark upon new enterprises,—industrial, agricultural or irrigational, whenever circumstances justify such a course.

During this period of the growth of public expenditure, the public receipts, including the public revenue as well as the public debt, have maintained their pace and recorded a steady rise. In 1881-82, the public debt of the State stood at Rs. 80 lakhs, (this was the famine debt due to the British Government), and at the end of the year 1939-40 it had increased to Rs. 1,445·81 lakhs made up of terminable long-term debts to the extent of Rs. 841·36 lakhs and the balance of Rs. 604·45 lakhs representing the unfunded floating debt. The careful investment of these resources has resulted in the building up of productive assets estimated at Rs. 1,905·18 lakhs. The excess of assets over the total liabilities of all kinds was estimated at Rs. 732·34 lakhs at the beginning of this year.

Revenue expenditure in Mysore has always been well within the limits of public revenue. A steady growth of both the tax revenue and the non-tax revenue has contributed to the stability and strength of Mysore Finances. The following table indicates the growth of public revenue and the relative shares of tax and non-tax revenues:—

[3] Dewan's Address to the Representative Assembly, June 1940.

NON-TAX REVENUE OF MYSORE

(*Amounts in lakhs*)

Year	Total Non-tax Revenue	Natural Resources: Sales of land etc.	Natural Resources: Forest: Sandal wood and oil	Natural Resources: Forest: Other forest revenue	Natural Resources: Mining	Natural Resources: Total	Natural Resources: P. C. of total non-tax revenue	Industrial Undertakings: Hydro-electric and Irrigation	Industrial Undertakings: Railways	Industrial Undertakings: Others	Industrial Undertakings: Total	Industrial Undertakings: P. C. of total non-tax revenue	Others: Interest including Dividends on shares	Others: Surplus of Assigned Tract Revenue	Others: Departmental Receipts	Others: Total	Others: P. C. of total non-tax revenue
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	
1920-21	107·89	7·20	17·65	14·67	14·82	54·34	50·36	17·12	10·91	4·32	32·35	29·98	10·64		10·56	21·20	19·66
1925-26	123·01	10·23	21·51	18·25	12·47	62·46	50·74	22·41	21·40	-8·76	35·05	28·46	7·64	4·42	13·44	25·50	20·70
1930-31	129·94	9·62	17·33	13·92	10·64	56·51	39·62	33·78	14·55	-6·34	41·99	32·28	18·83	2·92	14·69	36·44	28·10
1932-33	132·65	11·04	11·03	13·23	15·42	50·72	38·23	33·15	14·76	-0·57	47·34	35·70	12·61	2·70	1·928	34·59	26·07
1934-35	164·83	10·31	10·28	14·19	26·76	61·54	37·34	38·04	10·88	2·37	51·29	31·12	31·31	3·53	17·16	52·00	31·54
1936-37	181·26	16·06	14·96	17·61	30·49	79·12	43·65	42·17	18·41	5·63	66·21	36·53	23·12	2·45	10·36	35·93	19·82
1938-39	180·39	13·77	8·76	17·49	23·43	63·45	35·18	47·79	25·28	6·88	79·95	44·32	19·72	0·89	16·38	36·99	20·50
1940-41	178·90	12·60	7·45	17·16	26·27	63·48	35·50	51·57	22·57	4·87	85·11	47·56	19·18	1·50	9·63	30·31	16·94
(Estimate)								6·10*									

* Revenue under Irrigation shown separately.

The natural wealth of Mysore in the form of forests and mines provides a rich source of non-tax revenue. The total area of forests brought under State management consists of 4,630 square miles representing about 15% of the total area of the state. The importance of the rich forest wealth as a source of steady revenue was realised so early as 1863 when a separate department for the conservation and scientific exploitation of the forests was constituted. Sandalwood for which Mysore has long been famous is a very valuable product of the Mysore forests. From a very early time it appears to have been a monpooly. In 1833 for the first time the revenue from sandalwood appears as a separate item in the public accounts. Since that time the income from sandal has continued to grow. Prior to 1916, the wood was being sold in auction mainly for export to foreign countries and the Government were unwilling to try the experiment of extracting oil from the wood as it was considered "undesirable to interfere with a very highly satisfactory source of revenue." The conditions created by the Great War, however, necessitated a change of policy and in 1916 the Government started the first factory for the distillation of sandalwood. Since then the Mysore oil has set the standard as the quality product. The net receipts of the factory happen to constitute the forest revenue under sandal.

The sandal revenue has fluctuated in recent yaers showing a tendency to decline. The demand for a luxury product like sandal oil cannot be expected to be steady. Besides, the competition of cheaper oil and substitutes has been adversely affecting the price of Mysore oil.

Other forest products including the different species of timber constitute the source for the remaining portion of the forest revenue. Natural resources accumulated by the slow development of the ages are a heritage of the race and not merely of one generation. "In the development of Mysore forests care has been taken that the development has not been at the expense of the capital. In other words, sound sylvicultural tenets are not being sacrificed merely to reap transient monetary benefits. Posterity is not being mortgaged.

On the other hand, there has been perceptible addition to the capital."[4]

Another aspect of our forest revenue is the high yield of surplus and the low percentage of expenditure as indicated in the following comparative statement.

Forest Revenue 1937-38

Name of Province		Percentage of surplus to revenue	Percentage of expenditure to revenue
U. P.	...	45	36
C. P.	...	27	40
Madras	...	15·68	58
Bombay	...	37	48
Mysore	...	54	20

The mining revenue constitutes another big non-tax source. Almost the whole of this revenue is derived from the gold mines royalty. Since the commencement of the operations in 1885, the mines have been contributing a steadily rising revenue. Since the rise tn the value of gold there has been a perceptible increase in the revenue from this source.

The mines are worked by Joint Stock Companies incorporated in England under leases obtained from the Mysore Government. The present lease commencing from this year is for a period of thirty years. The terms of the lease provide for the payment to the Government of Mysore of

(*a*) a basic royalty of 5% upon all gold produced; and

(*b*) a supplemental royalty calculated in dividends declared by the companies, varying from 2½% to 40% as the percentage of dividend increased.

[4] "Mysore Forestry" by Abdul Jabbar, in *Current Science*, September 1940.

The operations of the Gold Mines from the commencement up to the end of 1938 show the following results:

Gold produced	... £ 88,723,426
Working costs	... „ 47,616,886
Profits ...	... „ 35,983,395
Dividends ...	... „ 25,967,733
Royalty ...	... „ 5,050,964

The benefit which the State has received in the form of royalty has been less than 20% of the amount distributed as dividends. Public opinion in Mysore is becoming more and more insistent on getting from this rich storehouse of nature a larger share than what she is at present deriving. The recent levy of a duty on gold produced is just a method of realising that object and securing a share of the prosperous income which is produced by the draining of the country's natural wealth. The Act provides for the payment by the owner of the gold works on all gold which is produced therein a duty equal to three-fourths of the amount by which its sale price exceeds one hundred rupees. This is expected to contribute a sum of Rs. 26 lakhs a year to the tax revenue of the State.

The revenue derived from the natural wealth, particularly from the two sources, *viz.*, the sale of lands and the exploitation of mines cannot be considered as stable sources of revenue. This aspect of the non-tax revenue has not been lost sight of in Mysore. Even in 1905 there was the suggestion that the mining revenue should be funded. In 1927, it was suggested that the sale proceeds of lands should be shown separately outside the ordinary budget heads, as the sale was "really a capital transaction." In 1938, in his address to the Representative Assembly the Dewan referring to this aspect of the problem said, "It has been suggested by financial purists that we should be doing only what is right if we put all the receipts from these sources into a development fund and applied that to all new schemes of expenditure . . . The plan we have been following is similar to this. The mines and the sandal wood monopoly have paid us in the past twenty years a revenue of Rs. 634 lakhs and

we have invested in irrigation in the same period an amount of Rs. 500 lakhs." The entire proceeds of the duty on gold are proposed to be allotted to development funds this year. It is such cautious policy in the utilisation of precarious and unstable sources of non-tax revenue that has contributed strength to the public finance of Mysore.

The industrial undertakings owned and managed by the State are responsible for another big portion of the non-tax revenue. A variety of economic activities have been undertaken by the State in pursuance of a definite policy of economic development. Since 1881 the Government have consistently followed the policy of industrialisation of the country. In the realisation of this objective there has been careful planning, and the Government have come forward to take a more active and practical interest. It is the conviction of Mysore that "in the peculiar circumstances prevailing in the country, State Socialism—and a generous measure of it—is not only desirable but is also necessary if the pace of industrialisation is to be accelerated."[5]

It must be noted that in no case of state ownership of industrial undertakings in Mysore has the fiscal motive been directly responsible for its start. Though undertaken with a view to accelerate the industrial progress, the concerns have been contributing substantially to the public revenue. Besides the direct revenue, as a result of the expansion of general industrial activity, the tax resources also are augmented.

Historically, the earliest state undertaking in Mysore happened to be the "*Anche*" or the postal system which was introduced during the 17th century and continued till 1889 in which year it was merged in the British Indian system. The concerns at present owned and managed by the State may be grouped as under:

(*i*) Public Utility services comprising Hydro-electricity, Irrigation, Railways and Water works. These together account for a total capital investment of Rs. 1,703·44 lakhs re-

[5] Dewan's Address to the Representative Assembly, 1936, October.

presenting nearly 90% of the total capital investment on all commercial undertakings.

(*ii*) Other industrial undertakings including the Mysore Iron and Steel Works. These share among them the balance of the capital investment, *viz.*, Rs. 287·74 lakhs.

(*iii*) Insurance.

The Insurance business is not made use of as a source of gain to the state. The policy underlying the state management of this business has been to utilise the gains for reducing rates of premia in justice to the insured.

The public utility services happen to be good sources of revenue. The Railways with a total length of 748 miles of different gauges are being managed with efficiency. The guiding policy of the management has been business economy consistent with public convenience. In 1938-39 the net receipts from the Railways happened to be Rs. 25·28 lakhs which on a capital outlay at charge of Rs. 666·09 lakhs works out a net yield of very nearly 3·8% and this return on the capital investment does not compare unfavourably with the return on capital in the case of State managed railways elsewhere.

The Hydro-electric and Irrigation works involve a capital investment of Rs. 874·32 lakhs, the irrigation portion being Rs. 339·39 lakhs. Till recently the Irrigation and Hydro-electric accounts were merged together and the works treated as a combined undertaking. Since last year the accounts have been bifurcated. The yield on Irrigation capital not charged to revenue works out at 1·80%.

Mysore has been the pioneer in the generation and supply of hydro-electricity. The project has been so successful that in the year 1938-39, excluding the capital invested on the new projects that year, the return on the capital outlay worked out at 9·70%. The demand for power has been ever on the increase and with a view to meet this growing demand new schemes are in progress and these when complete, will ensure a total capacity of 1,71,000 H.P. as against the present capacity of 75,000 H.P. The

revenue from this source during the past two decades has increased threefold. The undertaking has proved to be an elastic source of revenue and with the increase in industrial prosperity the revenue may be expected to expand further.

The remaining public utility undertakings are the two works for supply of water to Bangalore and the Kolar Gold Fields with a total capital outlay of Rs. 86·10 lakhs on which a return of 4·64% was realised in 1938-39.

The commercial undertakings of the second group consist of manufacturing establishments for the production of different kinds of articles. Of those the Iron and Steel Works happen to be the largest with a capital investment of Rs. 169·01 lakhs. The total capital invested on all concerns included in this group comes to Rs. 287·74 lakhs.

In the case of public industries there is always the possibility of overlooking the strictly commercial methods of business. In such cases it is difficult to determine how much of the surplus shown is really profit. In Mysore this aspect has received great attention, and particular care is taken to apply the rigid rules of commercial accounting before arriving at the net profits. Depreciation is invariably charged off. For example, this year it is reported that the entire profits from the Iron and Steel Works have been transferred to depreciation account. The different concerns have built up their own Staff Provident Funds. They pay interest on the working capital drawn from the Treasury. They are liable to pay even the local rates on the same scale as is applicable to private concerns. The only exemption they enjoy as compared with the private concerns is immunity from the payment of income-tax. In fact, the welfare activities in the State concerns happen to be a source of extra burden on them. There cannot, therefore, be any doubt regarding the genuineness of the net revenues of the various public industries in Mysore.

Viewing the public revenue from the commercial undertakings as a whole, during the past two decades there has been an increase from a total of Rs. 32·35 lakhs to Rs. 85·11 lakhs or an increase of 163%. The increase of revenue derived from the natural sources during the same period shows an increase of only 16·82%, *i.e.*, from Rs. 54·34

lakhs to Rs. 63·48 lakhs. As a percentage of the total non-tax revenue, the revenue from the natural sources shows a decline during the period under review from 50·36% to 35·50%, while the revenue from the industrial undertakings has increased from 29·98% to 47·56%. The latter is showing a tendency towards further increase. The increasing importance of the income from the industrial undertakings as a source of non-tax revenue is a very significant feature of the public finances of Mysore.

The remaining group of non-tax revenue requires but a passing reference. The revenue under interest includes the dividends received from the joint stock companies in which the Government are interested. This amounted to Rs. 1·89 lakhs in 1938-39. The surplus revenue of the Assigned Tract is the balance of the income over expenditure of the civil and military area of Bangalore whose administration has been assigned to the British. This amount has been a very fluctuating one.

To conclude, the non-tax revenue of Mysore is a substantial and increasing proportion of the public revenue of the state. The development of natural resources and the various industrial undertakings besides stimulating the economic activity in general has resulted in direct contribution to the public revenue. Indirectly, the business prosperity has increased the taxable capacity of the people. The importance of the non-tax revenue is to be judged from the point of view of both relief from extra taxation as well as a better distribution of the burden of taxation. The resources secured from the non-tax sources have enabled the Government to proceed with the various progressive schemes of beneficent activities with the willing and hearty co-operation of the people.

NOTE:—The figures relating to the public accounts are based upon various Government Publications.

SUMMARY

[As in other countries, in Mysore also, the growth of expenditure has been a feature of its public finance in the last few decades. This growth has been accompanied by a steady rise in the propor-

tion of expenditure on the beneficent services. Revenue expenditure has always been well within the limits of public revenue. A steady growth of both the tax revenue and non-tax revenue has contributed to the stability and strength of Mysore finances. The non-tax revenue is a substantial and increasing proportion of the public revenue,—the average for the past ten years being 42·5% of the total revenue of the State.

For quite a long time, the non-tax revenue has been a feature in Mysore but in recent years, it has become an increasingly important support for balancing the budget. Its influence during the period of economic depression was particularly marked. During the past two decades, the non-tax revenue has recorded an increase of 65·83% as compared with the increase of tax revenue of only 26·76%.

The non-tax revenue is classified for purposes of study as follows:—

I. Revenue derived from natural sources, *i.e.*, the public domain.

II. Revenue accruing to the State in its capacity as trader.

III. Revenue from other sources.

The revenue derived from the exploitation of natural resources comprises of the income from the sale of lands, the forest revenue and the mining royalty. The percentage of this source to the total non-tax revenue works out at 35·5 according to the estimates for 1940-41. The unstable nature of the incomes from mines and sale of lands as sources of support to the public finance has not been lost sight of in Mysore and it is observed that during the past twenty years an amount equal to 80% of the proceeds from such unstable sources of revenue has been invested in irrigation development, thus contributing to the permanent increase of prosperity.

The industrial undertakings owned and managed by the State are responsible for another big portion of the non-tax revenue forming 47·5% of the total non-tax revenue according to the budget for 1940-41. In no case of state ownership of industrial concerns has the fiscal motive been directly responsible for its start. Though undertaken with a view to accelerate the industrial progress, the concerns have been contributing substantially to the public revenue. From the point of view of revenue, the most important of the public undertakings happen to be the Railways, the Hydro-Electric and Irrigation Works, and the Water Works, which together account for nearly 90% of the total capital investment on all commercial undertakings. The possibility of overlooking the strictly commercial methods of business in determining the correct surplus has not been overlooked in Mysore and great care is taken to apply

the rigid rules of commercial accounting before arriving at the net profits.

Compared with the revenue from the natural sources, the revenue from the industrial undertakings as a whole show a substantial increase during the past two decades. As a percentage of the total non-tax revenue, the revenue from the natural sources shows a decline during the period under review from 50·36% to 35·5%; while the revenue from the industrial undertakings has increased from 29·98% to 47·56%. The latter is showing a tendnecy towards further increase. The increasing importance of the revenue from the industrial undertakings as a source of non-tax revenue is a very significant feature of the public revenue of Mysore.

The development of the natural resources and the various industrial undertakings besides stimulating the economic activity in general, has resulted in direct contribution to the public revenue. Indirectly, the business prosperity has increased the taxable capacity of the people. The importance of the non-tax revenue is to be judged from the point of view of both relief from extra taxation as well as a better distribution of the burden of taxation.

The resources secured from the non-tax sources of revenue have enabled the Government to proceed with the various progressive schemes of beneficent activities with the willing and hearty cooperation of the people.]

FIVE YEARS OF ORISSA BUDGET

BY

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The province of Orissa is now in the fifth year of her life. Five annual statements of revenue and expenditure are now available to take stock of her financial situation. One budget she had in the pre-reform days and the four others under the new constitution. This affords an opportunity of estimating the present position with reference to the state of affairs in the pre-reform period.

Balancing of the budget.

Of all provinces in India excepting the North-West Frontier province, Orissa has the minimum revenue and expenditure, taking into account even the subvention from the Government of India. The budget estimates for 1940-41 show the revenue at 195 lakhs and the expenditure at 200. In the budget speech for 1938-39, the Finance Minister deplored a repetition of deficit budgets in Orissa. "A succession of deficit budgets is enough to mar the credit of a province," he said. Deficits year after year are certainly deplorable. But the accounts available for the first three years belied the apprehension. The actuals for each of these three years showed a surplus. The budget for 1939-40 anticipated a deficit of 18 lakhs; but the revised estimates have reduced the deficit to 187 thousands only. It will not be surprising if this deficit is converted into a surplus, when the actuals are available. The current year's budget estimates a deficit of 5 lakhs again.

Taking the figures (actuals[1] for 1936-37, 1937-38,

[1] Figures, on this plan, have been followed throughout the paper.

1938-39; Revised estimates for 1939-40 and the budget estimates for 1940-41), for all these five years together, the total revenue comes to 9, 31 lakhs and the total expenditure to 9, 15. There is thus a surplus of 16 lakhs during the period of 5 years under review.

It is curious that the finances of this poor province of Orissa yield a surplus, falsifying all apprehension. The revenue has been over-estimated in two years' budgets, and under-estimated in the other two. But the expenditure every year has been over-estimated on the average by more than 10 lakhs. In certain cases, the estimates of expenditure have been very liberal and wide of the mark, in certain others, the amounts provided could not be spent due to absence of well-thought-out schemes for the purpose.

"Orissa can never hope to have a satisfactory budget, unless the flood problem is solved," records the budget speech for 1938-39. "It is not left to human imagination to gauge the possibility of a flood, which, if it occurs, is enough to upset the budget and sap away the vitality, not to speak of the taxable capacity of the people." Floods do affect badly both revenue and expenditure. But then, floods are no longer accidents in case of Orissa. It has now a certainty of succession every three or four years. It is reasonable, therefore, that the uncertainties of the flood might be spread over in three years' finances. A separate fund for the purpose, on the model of the famine relief fund, fed every year, will to a great extent, meet the difficulty. Further, there is no reason for maintaining the sanctity of balancing the budget every year. A succession of deficit budgets is certainly disastrous. But if the deficits and surpluses cancel out in course of every three or four years, there is no reason why this should not be taken as sound financial condition. Three or four years to be thus regarded as a broader unit of time for the budgetary purposes, will certainly mean financial sobriety and stability.

But the more important question remains yet to be answered. Even if the budget is balanced every year, or, say, in course of a period of three or four years, or, as is actually the case, there is a surplus in five years' time, have we solved the problem in the province? A poor beggar can

balance his budget by practising starvation. Has it been possible to bring into effect all the necessary measures to improve the economic life of the people? To what extent have they succeeded in supplying the necessary social services for building the nation? To find out the answer, it is necessary to look into the expenditure of the Government of the province.

Expenditure.

During these five years, the expenditure of the Government of Orissa has increased by 38 lakhs—from 162 lakhs in 1936-37 to 200 in 1940-41. This increase of 23% in the total expenditure might be considered to have appreciably increased the expenditure on social services. But then it is natural that the cost of security and administrative services cannot be proportionately small in small provinces, and therefore, it is difficult to improve the social services adequately.

TABLE I

Growth of Expenditure on Social services in Orissa.
(Rs. 000 omitted)

	1936-37	1937-38	1938-39	1939-40	1940-41
A. Expenditure on Social Service	39,76	42,63	44,06	47,84	48,01
B. Total Expenditure	1,69,20	1,75,78	1,81,29	1,95,96	1,99,88
C. Percentage of A to B	24·5%	24·3%	24·3%	24·4%	24·0%

The table above shows the growth of expenditure in Orissa during the five years on nation-building departments. The expenditure on social services in Orissa has increased by 8 lakhs in course of these five years. A sum of 8 lakhs only cannot be expected to have effected appreciable improvement in the social services. In the pre-reform year, 24·5 per cent of the total expenditure was devoted to the social services; in the current year, it is 24%. In many of the other provinces, the expenditure on beneficent departments has not only absolutely, but also more than proportionately increased. But in the case of Orissa the increase

in the total expenditure has not even proportionately improved the social services.

It might be urged that the improvements have been greater than indicated by the increase in expenditure, because of retrenchment and reorganisation of services. But this also applies to the security and administrative services, in computing the proportion of the expenditure. Besides, this reorganisation cannot have much of immediate effect on the finances; it will take time to fructify.

TABLE II

Growth of the Expenditure on Social Services in Orissa (Rs. 000).

		1936-37	1937-38	1938-39	1939-40	1940-41
Education	..	25,45	26,05	26,12	26,94	26,74
Medical ...	...	7,82	8,27	8,25	9,57	9,40
Public Health	...	2,00	2,48	2,181	2,75	2,07
Agriculture	..	1,02	1,63	2,24	2,50	2,30
Industries	...	1,46	2,06	2,50	2,92	3,23
Co-operative	...	1,12	1,08	1,74	2,05	2,93
Veterinary	...	90	1,03	1,01	1,09	1,32
Total	...					

TABLE III

Expenditure on different Social Services in 1940-41 (Rs. per one thousand of population).

	Education	Medical	Public Health	Agriculture	Vet.	Industry
Madras	586	222	60	44	25	57
Bombay	1120	275	175	68	24	40
Bengal	335	116	97	35	14	42
U. P.	451	77	49	148	11	44
C. P.	351	112	39	69	32	22
Bihar	241	82	47	47	13	35
Sind	809	221	82	239	32	43
Punjab	705	218	112	170	78	90
Assam	466	168	107	75	23	29
N.W.F	992	337	75	120	72	28
Orissa	332	117	26	29	16	40

It will be seen from Table II above that there has been a very slight increase in the expenditure under education as well as public health during these five years. It is, therefore, evident that nothing much of improvement has been effected in these respects during this period. The increase in the medical expenditure has been by one lakh and a half, which includes an appreciable sum in the medical establishment on account of the introduction of opium prohibition. Thus what is done to-day for the education and health of the people of Orissa is not much different from what it was on the eve of the introduction of provincial autonomy. The annual expenditure on education per one thousand of the population in Orissa is the lowest compared with the other provinces of India excepting Bihar. The medical expenditure does not compare so unfavourably with all other provinces; but still it is exceedingly low indeed. Other provinces have a number of privately-financed educational institutions and large endowments, of which Orissa has far too few. There is scarcely any privately-financed charitable hospital or dispensary in the province, and the absence of any considerable number of private medical practitioners indicates that not many people in this province can afford private treatment. This necessitates comparatively great educational and medical facilities to be provided by the government in Orissa. The Government of Orissa spends on public health Rs. 26 only per one thousand of the population, which is the lowest in India and compares miserably with other provinces. It is no use explaining the consequences of such a state of affairs. There remains thus a good deal to be done for the provision of education, public health and medical facilities, even to reach the standard of the advanced provinces of India.

Let us then consider how far attempts have been made for increasing the income of the people. Expenditures under agriculture, industries, Co-operation and Veterinary departments have more than doubled during the period under review. Attempts have been made to improve the facilities in these respects. But then, it must be realised that unlike probably any other province in India, Orissa is entirely dependent on agriculture. Flood has become a normal event

with regular occurrences at short intervals. The peasantry of Orissa is exceedingly poor and helpless at the uncertainties of weather. Table III shows that the expenditure under agriculture is again the lowest in India. The Government expenditure has only touched the fringe of the problem. The activities of the Veterinary department are mostly confined to urban and semi-urban areas, and the distant villages have not yet been able to get the benefit of the Services. So far as industries are concerned, the increase in expenditure has been for the development of Cottage industries mainly through the All-India Village Industries and Spinners' Associations. But it must be remembered that with regard to large scale manufacturing industries, Orissa is the most backward corner of India. Orrisa certainly has got resources; they have got to be surveyed and Government might inaugurate industrialisation even by providing capital for the industries at the initial state. Private capital and enterprise are now not forthcoming. The Government have therefore to make enormous efforts in this direction; an annual expenditure of Rs. 40 per one thousand of the population will not even scratch the surface of the problem.

It is apparent from the above discussion that Orissa needs a good deal of funds to embark on the necessary schemes. The improvements attempted are rather too meagre for a population of 83 lakhs. Conditions of life, specially in the villages, have not in the least improved. It is curious that a sum of 5 lakhs of rupees, provided in the last year's budget, has lapsed wholesale due to lack of necessary schemes for the purpose.

Being long tagged on to different provinces, and consequently due to absence of sufficient attention, Orissa started with an initial deficiency in many respects. A High Court and a University, absolutely necessary for the necessary development of a separate entity, have yet to be established. Orissa does not possess a medical or an Engineering College. Technical training institutes, there are none in the province. The colossal problem of flood still stands unattempted. Are not the people in this province the poorest in India? All these need large amounts of money, and the problem there-

fore before the Government of the province is how to obtain the necessary funds for all the purposes.

Revenue

Revenue, under the new constitution, has increased in every province. In Orissa, during these five years, the increase has been by 20 lakhs or 11%—from 175 lakhs in 1936-37 to 195 in 1940-41. Land-revenue is still the most important source of revenue, as it is in all other provinces. During this period, the income from land-revenue in Orissa has been almost stationary. She obtains a large portion, namely, 32% of her total revenue, excluding the subvention from the Central Government, from this source. Dependence on this source is rather very great, considering the fact that large parts of the province are under permanent settlement and that Bengal and Bihar obtain only 26 and 24% respectively of their revenue from land revenue. It goes without saying that in the existing circumstances, there is absolutely no scope for increasing the yield from this source.

Provincial Excise has always been the next important source. The policy of prohibition, when fully carried out, will completely wipe out the income from this source. But then the partial prohibition in a limited area has only reduced the income by 4 lakhs, under this head—from 33 to 29 lakhs in the current budget.

It remains then to be explained under what heads has the increase of 20 lakhs in the revenue been obtained. Orissa receives only about a lakh of rupees from the Central Government as share of the Jute Export Duty. The 2% share of the amount of income-tax distributed among the provinces, has increased the revenue of Orissa by 5 lakhs. The income under Motor Vehicles taxation has only slightly increased during these five years; but it is capable of being expanded much more.

A very considerable increase has been recorded under the head "Interest," which stands at 13 lakhs in the current budget. The interest on the pre-reform irrigation debt is, under the Niemeyer Settlement, no longer paid to the Govern-

ment of India. This accounts for the accrual of about 11 lakhs under this head; the corresponding amount being shown as expenditure under the item of irrigation. This however, does not make any difference between the budgets for 1936-37 and the current year, since in the former year, the subvention received from the Central Government was 50 lakhs in place of 40 lakhs to-day. This adjustment of 11 lakhs has, moreover, the effect of inflating the budget figures. The subvention has been again 3 lakhs more in the current year on account of initial expenses regarding construction of buildings and the like. This grant of 3 lakhs will however cease after the next year. The revenue under "Interest" further includes 85,000 rupees on account of interest obtained by investing the building fund received from the Government of India. This will continue only as long as the whole fund is not spent up. Now all this goes to show that the increase in the revenue and expenditure are to some extent merely temporary or on account of book-keeping procedure.

There has been a very appreciable increase in the revenue under "Civil Works," from 1½ lakhs in 1936-37 to 9 lakhs in the current budget. This is due to the inclusion of the amounts received from the Central Road Development fund and the fund for Orissa buildings. So far as the latter is concerned, it serves merely to inflate the budget figures, since this amount has already been entered as revenue under "building subvention," the corresponding amount as expenditure under "transfer to the building fund" and the same amount over again as revenue under "Civil Works" to be spent by the Public Works Department.

The same effect on the budget has also been produced by the income and expenditure of the forest department. In every other province, Forest Department has been a source of net income to the Governments. But in Orissa the expenditure in this department has always been slightly in excess of the revenue, though Orissa is certainly rich in her forest wealth. During these five years the revenue and expenditure have both increased by two lakhs, just to indicate the value of concession given to the people which is shown under expenditure, the corresponding amount being

entered as revenue. This is thus another case which serves the purpose of only inflating the budget figures.

Some increases, it must be mentioned, have been registered under stamp, registration and departmental receipts.

It will therefore be seen that the increase in the revenue and expenditure has been, to some extent, unreal and mere eye-wash and, to certain extent, temporary also. The real increase has only been by what the Government of India has granted, *viz.*, under customs, income-tax, remission of interest charges and the direct subvention. Most of the existing sources of revenue are not capable of any expansion, and about a few others, which are capable, no attempt at improvements seems to have been made.

There are constitutional restrictions indeed on the powers of the provincial Government with regard to new taxation. But it is no use making too much of them. Within the powers given to the provinces, a number of productive sources of revenue can certainly be tapped. Taxable capacity of the people very greatly depends also on the way how the income is spent. The ever important social services do require large amounts. It is curious that Orissa is the only province which has not attempted any new taxation, while every other province in India has imposed one or more additional taxes.

A word of caution, it is necessary to put in, at this stage. It is no use increasing the revenue for its own sake. There should first be made definite programmes and schemes of work under definite plans, and it is only then that there will be justification for new taxation to execute them.

It is curious that in this province, the budgetted amount one year could not be drawn from the Central Road development account on account of the fact that projects were not ready for execution. Provision made in the budget for a provincial library could not at all be spent. A sum of 5 lakhs of rupees provided in the last year's budget for constituting a fund for village development has now lapsed wholesale due to no schemes having been framed for the purpose. It is essential therefore that definite schemes and programmes of work should first be decided upon, before tapping any new sources of revenue for the province.

New Sources of Revenue

In the light of the new taxes imposed and possibilities explored in other provinces, certain important and productive sources of revenue, Orissa can certainly have. One of the most important of such taxes is a tax on agricultural income. A very peculiar feature of the Indian income-tax is the exemption of agricultural income. This has long been the subject of discussion in India. In pursuance of the power, given to the provinces, under the Act of 1935, Bihar and Assam have since imposed taxes on agricultural income and certain other provinces are contemplating such imposition. There is certainly a just and desirable case for such a tax in Orissa, and the permanent settlement in many parts of the province makes the case stronger. That agriculture is a distressed industry and that the poor cultivator in Orissa will be hard hit, are arguments which have no relevance in the case, since there will be an exemption limit and only the net income after allowing for all other payments will be assessable. In Bihar, the exemption limit is 5000 rupees and the rate of the tax and graduation are rather low, based on the old system of general income-tax. On a very rough and conservative estimate, the yield from such a tax in Orissa, based on the Bihar model, will come to something over four lakhs of rupees only. But on grounds of equity, there is no reason why the exemption limit should be higher than Rs. 2000. The only argument may be with respect to cost of collection. The Assam Act is certainly more equitable; it is based on the lines of the recent changes in the general income-tax. The 'slab' method is more equitable than the 'step' method. In 1940-41, Assam estimates an income of 25 lakhs while Bihar expects only 14 lakhs from this source. Orissa, in all fairness, should follow the Assam model and the yield will then come to 9 to 10 lakhs, an amount which is quite considerable in the case of Orissa.

Another substantial source of revenue lies in the sales tax. Every province in India, with the only exception of Orissa, has, during the last four years imposed sales taxes on one or more of selected commodities, while Madras has, besides, imposed a general sales tax. After the last war,

many European and American States have imposed such taxes and in many of them, the yield from this source has been higher than either from income-tax or custom duties. A general sales tax is regressive in character; but in poor and populous communities, as in Orissa, such taxes are largely to be depended upon. The Excise revenue of Orissa amounting to 30 lakhs is being raised from 10 to 15% of the population, least able to bear the burden. The general sales tax will distribute this burden on the whole population and therefore is certainly preferable to the excise duties on intoxicants. The whole loss from the excise revenue due to prohibition should be made good from the general sales tax, and that will mean justice in the distribution of the tax burden. This is an equitable way of taxing the general mass of the people and if the exemptions and rates are kept at reasonable limits, it will not have any adverse effects on trade and business. This tax will prove to be an elastic source of revenue, which can be adjusted according to requirements.

Among the selective sales taxes, tobacco tax has been a very important one. Tobacco has become a conventional luxury and is being very widely consumed in one form or another. The burden of the tax will therefore be widely diffused, and different rates on different qualities and varieties of the commodity will make an approach to the principle of ability to pay. The Madras system of taxing the manufacturer, wholesaler and the retailer has been very ably and justly made out, though it has made the system complicated. The consideration justifying the tobacco tax in so many other states and provinces in India, apply with equal force in Orissa.

Sales taxes on articles of luxury are more commendable on grounds of equity. A sales tax on motor spirit has been imposed in almost every other province in India, though with different rates. This tax satisfies all the canons of taxation and the cost of administration is exceedingly easy and cheap. Orissa ought to have imposed this tax, by now, along with the other provinces.

There is again a good deal of scope for improving the motor vehicles taxation in Orissa. The rate of motor tax

in South Orissa is double the rate in North Orissa. It is only fair that the rate should be made equal throughout the province, if not raised higher. Whether the yield is retained by the provincial Government or a portion is distributed among the local bodies, the effect on the provincial finance is the same. The revenue from this source can also be increased by increasing the rate and graduating the tax according to the size, carrying capacity and horse-power of the vehicle. It appears desirable, in view of the poor construction of the roads in Orissa, that the yield from the sales tax on motor spirit and the motor vehicles taxation should be earmarked for the improvement of roads in the province.

The Governments of Bengal and the Central Provinces have imposed a tax on trade, profession, calling and employment. Employment tax suggested by the United Provinces is not permissible under the Act. Orissa can reasonably have a tax based on the Bengal model on all persons assesed to income-tax. The total number of income-tax assessees in Orissa is 1800, of whom about 100 obtain their income from investment etc. Therefore, a tax at the rate of Rs. 30 as in Bengal will yield Rs. 51,000 in Orissa, which is certainly worth while having.

Inheritance tax is one of the most equitable taxes in modern states. This tax will provide a very productive sources of revenue to the provinces. The India Act of 1935 empowers the provinces to impose inheritance tax on agricultural lands only. But it will be very unfair to have such a taxation, unless all the other forms of property are similarly taxed, which can be done only by the Central Government, though for the benefit of the provinces.

There are a number of other taxes like entertainment and betting tax, electric duty, prize competition taxes and the like for which there is no scope at all in Orissa. Numerous such taxes yielding very small revenues are vexatious and irritable, and these are not worth while having.

It is felt that the subvention given to Orissa by the Central Government is rather small. The Finance Minister of Orissa had also referred to this in his budget speech for 1937-38. Subventions are necessary due, besides other things, to the particular scheme of financial distribution

adopted in the federal finance. An ill-equipped and poorly provided province is, like the weak link of a chain, a drag on the national development of a country. Sir Walter Layton's scheme of constituting a provincial fund out of the salt and excise duties and distributing the same among the provinces on the basis of population would have been better for provinces like Orissa. There is certainly a case, under the present circumstances, for a larger subvention for Orissa. If the consumers of Orissa, it may argued, are paying large sums to the Government of India on account of the protective duties for the benefit of the industrial provinces, Orissa should reasonably expect a share of the yield of such duties, since she has no industries, for which she should make this sacrifice. All that is suggested is that in case the question is reopened, Orissa's claim for a larger subvention should receive proper consideration.

It will appear from the discussions above that under the present circumstances, even within the constitutional limitations, Orissa can obtain a large amount of money for embarking upon social welfare work. And, it bears repetition to state, that definite schemes of work under systematic plan should first be made before tapping the new sources of revenue for the purpose.

SUMMARY

Balancing of the budget

During this period, deficit budgets have resulted in surpluses in the actuals. This has been due to the fact that expenditures were very liberally estimated, and, in some cases, amounts provided in the budget could not be spent because the necessary schemes were not already framed. The uncertainties in the budget introduced by the occurrence of floods can reasonably be distributed over a certain number of years.

Expenditure

There has been an increase in the total expenditure during the quinquennium; but this has not even proportionately improved the social services. The per capita expenditures on the different social services are exceedingly low in Orissa, and in many cases, the lowest in India. There is considerable leeway to make up even to reach the standard of the advanced provinces in India.

Revenue

The increase in the total revenue has been to some extent temporary, and unreal also to certain extent, being merely book-keeping adjustments on revenue and expenditure. The actual increase has been due to the share of jute export duty and income tax as also to the remission of the pre-reform debt and the direct subvention. There is scarely any scope for the improvement of the existing sources of revenue.

New Sources

Orissa is the only province which has not imposed any new tax. A tax on agricultural income, a general sales tax, selective sales taxes on tobacco moter spirit, an increase in the rates of Motor Vehicles taxation and a tax on trade and profession are suitable and desirable sources of revenue for Orissa. For certain other taxes imposed in other provinces, there is no scope in this province.

There should however first be made out definite schemes and programmes of work before tapping these new sources.

THE TAX SYSTEM OF MYSORE STATE

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1. *Introduction.*

There is a certain marked proclivity in some sections of British Indian statesmanship to label Indian States a museum of quaint and antique political customs and institutions, generally lagging behind in the march towards progress. Views of this ilk are constantly thrown up in the flux of opinion on the position of states in a potential All-India Organisation. Such an attitude might prove to be illiberal on a closer examination of the institutions condemned. A brief descriptive and critical account of the public income of Mysore is here undertaken, which may indicate that there are aspects of Public Administration in which Indian India marches abreast, if not ahead, of the British Indian Provinces.

All schemes of public revenue have a peculiar relevance to a given quantity and quality of Governmental activities. And, the dynamic character of Public Expenditure serves as a good measure of the progressiveness of any given system of Public Income. The table below indicates the changes both in the nature of Public Expenditure in Mysore and in its revenue resources.

[1] Considerations of space preclude detailed references. Relevant data have been obtained, where the source is not specifically mentioned, from the Budget Estimates, Statistical Abstracts and Departmental Reports of the Mysore Government.

TABLE I

Public Expenditure and Public Revenue in Mysore.[2]

Year	Public Expenditure (in lakhs Rupees)	Expenditure on nation building services (Rs. per thousand of population)	Public Revenue (in lakhs of Rs.)
1900—01	223·72	220	191 81
1910—11	234·88	333	246·73
1920—21	344·11	1,325	313·13
1930—31	397·89	1,431	332·85
1940—41 (Budget Estimate)	452·51	1,521	439 06

We find that within a generation the volume of Public Expenditure has more than doubled and a radical change has taken place in the outlay of Public Income devoted to the inducement and creation of public welfare. These changes have been permitted by the dynamic quality of public resources, the successful tapping of which is a test alike of the skill and success of statecraft.

2. *Tax and Non-tax Sources.*

As in other countries, our public income is derived partly from tax and partly from non-tax sources.

[2] The disparity between Public Revenue and Expenditure is explained by the fact that the figures for the latter, intended to convey the expansion of Governmental activities, represent total expenditure, including expenditure met from reserve and other funds, and not merely Expenditure charged to Revenue.

The expenditure on nation-building services include figures for Education, Medicine and Public Health, Agriculture, Veterinary, Industry and Commerce, Co-operative Societies, Scientific Departments and Public Improvements.

Expenditure on nation-building Services (without the last item above) in the British Indian Provinces and Mysore may be compared: (1939-40 per thousand of population): Madras Rs. 1049; Bombay Rs. 1828; Bengal Rs. 669; U. P. Rs, 824; Punjab Rs. 1458; C. P. Rs. 658 Bihar Rs. 460; Orissa Rs, 566 and Mysore Rs.1451.

(Figs. for the Provinces are taken from P. J. Thomas, *Growth of Federal Finance in India*).

Normally about a third and in recent years an increasing proportion, of Public Revenue is derived from sources other than taxation. The actual receipts from the two sources, and the proportion of total revenue contributed by each source, may be observed from the figures in Table II.

TABLE II

Tax and Non-tax Revenue in Mysore.

(In lakhs of Rs.)

Year	Total Public Revenue	Tax Revenue	Non-tax Revenue	P. c. of tax revenue to Total Revenue	P. c. of non-tax revenue to Total Revenue
1900—01	191·81	142·43	49·38	74·5	25·5
1905—06	226·76	137·35	89·41[3]	61·00	39·0
1910—11	246·73	161·53	85·20	65·5	34·5
1915—16	281·12	176·77	104·35	62·9	37·1
1220—21	313·13	212·43	100·70	67·8	32·2
1925—26	346·37	233·59	112·78	67·4	32·6
1930—31	332·35	212·03	120·32	63·8	36·2
1935—36	385·76	233·62	152·14	60·7	39·3
1940—41[4]	439·09	246·76	192·30	56·1	43·9
(Budget Estimate)				59·8	40·2

Nature has been bountiful with us and man has not been tardy to develop and utilise natural resources.[5] We have rich gold fields which, though worked by a foreign company, contributes normally a fifth and in 1940-41 over a quarter

[3] In addition to an increase in revenue from Forests, Railways, Mining and Miscellaneous Non-tax sources, a new source *viz.*, the Cauvery Power Scheme (Rs. 19·09 lakhs) has been taken into account.

[4] The two percentages are for with and without the special duty on Gold (of three-fourths of the amounts by which the sale price exceeds Rs. 100 per ounce of gold) levied from 22nd March, 1940.

[5] In fact, in the Budget speeches of the Dewan, the Public Revenue of Mysore is treated under three categories: Gifts of God; Results of the States' commercial enterprises; and Contribution of the tax-payer. Cf. The Dewan's Address before the Representative Assembly, June 1935.

of the public income of the state.[6] Our forests are rich in timber and they yield the fragrant sandal of which we have a monopoly, and our revenue from forests amounts to nearly Rs. 25 lakhs (1940-41). The generation of power, the provision of irrigational facilities and railways are public undertakings contributing a net revenue of Rs. 80·24 lakhs. Industrial and other works of the Government are estimated to contribute a sum of nearly Rs. 5 lakhs.[7] The industrial policy of the Government and its success are not, however, best judged on the receipts under the head "Industrial and other works." These receipts have been small and a few of the works have often resulted in a loss. But the object of these works is not so much to obtain direct profit to the Government as to make the state self-supporting both from the point of view of the requirements of the people and those of the Government.[8] That is the chief significance of the several industrial enterprises of the state such as Iron and Steel, Cement, Soap, Porcelain, Silk Weaving, Serum and Implements-making.

The Industrial policy of the Government in recent years not merely promises glorious prospects of industrial development, but has, at the same time, an intimate bearing on the public income of the state. The policy of direct state-ownership and management, the object of much disparaging criticism, has given place to one of state-cum-private enterprise. The original start to industry is given by the state. The Government does the prospecting for establishing new industries. It is virtually the entrepreneur. It contributes and advances a considerable portion of the initial and share

[6] It is estimated that in 1940-41 Royalty on Gold would fetch Rs. 26 lakhs, the special duty on Gold Rs. 26 lakhs, Income-tax on the Mining Companies Rs. 13.64 lakhs, super-tax Rs. 7·22 lakhs, Excise about Rs. 9 lakhs, consumption of electricity Rs. 31·85 lakhs, net receipts from K. G. F. Water Works Rs. 1·51 lakhs—Total Rs. 115·22 lakhs.

[7] Note that the Iron and Steel Works and Cement Plant, the most important of these works, resulted in an actual profit of Rs. 24 lakhs in 1939-40, which amount was transferred to the Depreciation Fund.

[8] Address of the Dewan, Sir Mirza M. Ismail, before the Representative Assembly, 14th June, 1934.

capital. The safety and stability associated with state support and participation evokes a ready supply of private capital.[9] The motive of private profit is duly tempered by the role in industry of the state, which stands for the larger interests of the community. Sound in itself, the new industrial policy adds to the revenue of the state, directly and indirectly, in the form of profits on the shares held in the several concerns and by way of additions to the revenue from Income-tax, Stamps, Registration and Excise. As Professor D'Souza observes, "Industrialisation is pushed on with all the resources at the disposal of the Government and industrial profits will by and by increase taxable capacity.[10] Moreover, industrial development, so inaugurated, lends a broader basis to the economy of the country and renders its tax scheme more flexible. As it is, however, the tax system of Mysore partakes of the narrowness and lack of flexibility characteristic of the public finance of an agricultural economy. And, specially in recent years, say, for example, from 1925-26, the increase in revenue is chiefly the result of an improvement in the non-tax source and is not obtained by increasing the absolute burden on the people.

3. *Tax Revenue.*

Any improvement, however great, in non-tax sources does not detract from the genuine significance of the tax sources. For, taxation is not merely the main normal source of publication but, specially under the conditions of Mysore, it may in the long run be called on to resume its premier role in the finances of the State. Nature may prove to be fitful and man capricious. The revenue from Gold Mining and Sandal Oil sales may diminish or disappear altogether. There may be adventitious or advisable restraints to the present pace of industrial development. What, then,

[9] A number of industrial concerns such as the Mysore Sugar Company, the Mysore Paper Mills, the Mysore Chemical and Fertilisers, the Mysore Spun Silk Mills, the Mysore Glass Factory and the Mysore Stoneware Pipes and Potteries have been established under this policy.

[10] V. L. D'Souza, *Economic Development of the Mysore State*, p. 43.

is the structure and character of the tax system? What is the necessity or prospect of its development?

Tax revenue which yields, normally, about two-thirds of the public income of the state is derived from a variety of imposts such as Land Revenue, Excise on Liquors and Drugs, Income-tax, Stamps, Registration and a few miscellaneous taxes. Receipts under the several taxes and the part played by each impost in the tax scheme may be studied from the figures below:—

Tax Revenue in Mysore.

(Budget figures in lakhs of Rs.)

Years	Land Revenue	Excise on Liquors and drugs	Income and super taxes	Stamps	Registration	Miscellaneous	Total tax revenue
1900—01	98·31	26·17	...	7·94	...	...	142·43
1901—11	106·79	41·99	...	8·26	1·62	2·86*	161·53
1920—21	108·30	77·22	8·15	15·70	3·10	...	212·43
1930—31	111·06	66·54	12·36	19·14	2·93	...	212·03
1940—41	125·00	48·10	35·00	17·67	3·00	17·99†	246·76

Proportion of Total Tax Revenue Contributed by the Several Taxes.

(Percentage)

Year	Land Revenue	Excise on liquors and drugs	Income and super taxes	Stamps	Registration	Miscellaneous taxes
1900—01	69·0	25·4	...	5·6	...	...
1910—11	66·1	26·0	...	5·1	1·0	1·8
1920—21	50·5	36·4	3·8	7·4	1·8	...
1930—31	52·4	31·4	5·8	9·0	1·4	..
1940—41	50·6	19·4	14·2	7·3	1·2	7·3

* Assessed Taxes: The Mohatarfa, tax on vacant sites and looms in villages.

† Excise Duty on Matches Rs. 3·41 lakhs; on Sugar Rs. 13·00 lakhs; on Power Alcohol Rs. 1·08 lakhs; and the Betting Tax Rs. 0·50 lakhs.

The changes in the composition of the tax system are well revealed in the figures above. The preponderance of Land Revenue and Excise easily strikes the eye, as also the inelasticity, from the point of view of revenue, of the tax system, specially, during the last twenty years. New taxes have been introduced from time to time, the proportion of tax revenue contributed by these increasing from 5·6 p.c. in 1900-01 to 30·0 p.c. in 1940-41. Undoubtedly, the most important of those new taxes have been the Income and Super taxes, and taxes on consumption such as the Excise Duty on Matches and Sugar. It is quite plain that as in the rest of India, the absence of large individual incomes in a community of small peasant proprietors and cultivating tenants does not admit of a rich source of revenue from income taxation. And, with due consideration to the fact that a large part of the revenue from income and super taxes is derived from the profits of the Mining Companies, the steady increase[11] both in the absolute amount of revenue from income taxation and in the proportion it bears to total tax income may be deemed to indicate the ebb of prosperity in the state and the comparative elasticity of this source of revenue. As for Taxes on Consumption, these afford a most convenient means for reaching the tax paying capacity of the poorer classes and such taxes have been estimated to contribute from a quarter to half the public revenue of even several of the Western countries.[12] As a dependent state and without access to the sea, the most fundamental of consumption taxes such as the customs duties and duties on articles of general use such as salt are denied to Mysore. Even for the duties on Sugar and Matches the state is, in a sense, at the mercy of the British Indian Treasury. They had to be imposed here when the Imperial Government felt the need for them in British India, and they would cease to be significant in the state the moment conditions permit their

[11] 1930-31 ...	Rs. 12·36 lakhs	1936-37 ...	Rs. 22·33 lakhs
1932-33 ...	Rs. 12·73 „	1938-39 ...	Rs. 28·20 „
1934-35 ...	Rs. 23·82 „	1940-41 ...	Rs. 26·00 „

[12] *Annals of the Amecican Academy of Political and Social Science*, January 1936, p. 35.

being reduced or altogether abolished in British India.[13] But there is one saving grace about the Indian Match Excise Duty. It has for the first time created a welcome precedent of refunds to Indian states of a tax levied by the Government of India on an article of universal consumption. The question that such a precedent would raise awkward issues in regard to the customs revenue has been raised and it will have to be answered to the satisfaction of the Indian States.

There is, however, one measure of consumption taxation which has not yet been tried. The Sales Tax has come to be regarded as the tax second in importance in the world today, a close rival to customs and income taxation in several of the fiscal systems of the west. In an agricultural community, with a substantial amount of production for home consumption, sales taxes are effective only within limits. But with a rise in the standard of living and diversification of the consumption of the masses, a sales tax is likely to provide a fruitful source of revenue. A well planned Sales Tax measure has a place even in an agricultural economy: as a possible corrective of any disproportion in the distribution of the burden of taxation as between rural and urban areas. Nor would such a tax be altogether an innovation in the fiscal history of Mysore. A duty, known as 'Kurgpudy' on the wholesale and retail sale of all articles had for long been levied in the state, and an annual revenue of between Rs. 8—9 lakhs was being realised by the levy of this and kindred duties, for over twentyfive years before it was abandoned in 1861.[14] On the whole, however, consumption taxation plays as yet a minor role in the fiscal system of Mysore.

[13] For, one would not have the sugar industry in Mysore at a competitive disadvantage with the British Indian producers and the quantity of matches produced is as yet negligible.

[14] *Cf.* (*a*) *Memorandum on the Finances of Mysore*, Office of the Dewan of Mysore, 6th February, 1884;

(*b*) Letter dated, 16th December, 1906, Bangalore from Mr. V. P. Madhava Rao to Mr. Frazer, regarding the abolition of Halat Duty;

(*c*) Dr. K. N. V. Sastri, *The Administration of Mysore under Sir Mark Cubbon*, Appendix C.

4. *Land Revenue.*

The bulk alike of tax and total revenue continues to be obtained from taxation on land and the excise on liquors and drugs. Even to-day the two together contribute over 70 p.c. of tax and about 42% of total revenue. Of these, land revenue though it has somewhat lost its original significance still contributes nearly half of tax income and over 30% of the total public income. The inelasticity of land revenue is a commonplace of studies in Indian Public Finance and so is the element of uncertainty worked into fiscal schemes based on this source of revenue.[15]

Land Revenue in Mysore is derived mainly with reference to two prevailing types of tenures, Ryotwari and Inamdari, the bulk of land being under the former tenure.[16] That considerations of fairness in assessment and wellbeing of the cultivator were constantly kept in mind is evident from the numerous provisions as to the classification of soil, the grouping of villages, differentiation of rates with reference to the different types of cultivation, the insistence, during the time of original assessment,[17] on fixing the maximum rates on the basis of the economic condition of the ryot and the nature and effects of the past management of the taluk. Resurvey and Settlement take place only at the end of thirty years of the original assessment, and, even then, with reference to general considerations of the value of land as to soil or situation, prices and facilities of communication. Rigid limits are laid down to the enhancement of assessment permissible at a Revision Settlement, and all improvements made from private capital and resources are specifically allowed for. What is more is the generous provision for

[15] Observe, for instance, the fall in land revenue in recent years.

1929-30	...	Rs. 126·38 lakhs	1936-37	..	Rs.130·66 lakhs
1930-31	...	Rs .111·06 „	1937-38	...	Rs. 119·26 „
		1938-39 ... 116·09 lakhs.			

[16] Over 78 lakhs of acres are under the Ryotwari tenure and the total extent of Inam lands is about 6·5 lakhs acres.

[17] The Survey and Settlement Operations were first started in the Harihar Taluq in November 1863.

the remission of assessment in the case of failure of crops, whereas actually the Government demand is the sum that is claimed on a fair average of seasons. The main drawback of such a scheme of assessment is, that it is based on empirical considerations on the subjective impressions of local knowledge and experience, and not on any scientific basis. Even this is essentially a remediable defect, and we find that in Bombay, from where we have adopted the principles of our land revenue assessment, with the introduction of the Record of Rights in 1900, the letting value has become the chief consideration in the Settlement operations.[18] The scheme of the Record of Rights introduced in Mysore in 1927 is well nigh complete for the whole state. From the exhaustive information it furnishes as regards rent,[19] the demand on land, at any rate during future settlements, may be equated to a definite proportion of its rental value.[20]

The basis of rent suggested, again, would have to reckon with the element of local prices, which indeed has become the crux of the agricultural problem. Though much of our farming is for subsistence an increasing proportion of it need, with every approach towards a balanced economy, be devoted to markets. Even for the subsistence cultivator, his surplus produce would have to fetch him money for paying the government's cash demand and for the purchase of his small luxuries. Necessarily, the vagaries of the price level, specially of agricultural produce, have an important bearing on the prosperity of the ryot. In fact, one of the chief defects of the Ryotwari Settlement is that it is not adjusted to the trend of prices during which it is current. That assessment would, therefore, be ideal, which automatically adjusts itself to the price level and the ability of the assessee as affected by changes in prices. The Punjab Government has, since 1935, successfully tried the experi-

[18] Evidence of A. W. W. Mackie, I. C. S., Settlement Commissioner and Director of Land Records, Bombay, before the Indian Taxation Enquiry Committee, 1926, p. 392 (*Evidence*, Vol. VI).

[19] Form No. VII, Tenancy and Crop Register. the Record of Rights Regulation X of 1927.

[20] In these days of competitive rent the rental value may be regarded as a fair index of the net income from land-holding.

ment of basing and adjusting its land revenue demand for any year upon the actual price prevailing in the locality during the previous year.[21] The other remedy of recovering the Government dues in kind, of storing grain and paying grain wages to labourers engaged on special public works is reported to have been tried in Aundh.

Among other features of land revenue in Mysore is the existence of Inams or gifts of land, conferred in the past for services rendered to the State or the Ruling Family, held free of or subject to very light assessment. Besides the loss of revenue involved in the creation of Inams,[22] a series of evil consequences have followed from the vague and often insecure position of the ordinary tenant under the Inam tenure. Not only has a good area of land in the state been allowed for long to lay fallow or be badly cultivated, but there has been perpetual litigation between the Inamdars and the cultivators. The Government however, has been prompt in setting things right through the compulsory introduction of Survey Settlement in all Inam villages, the reduction of the period of uninterrupted possession required to raise the presumption of permanent tenancy from 20 to 12 years, and the application of the remission rules of the Government to Inam tenants.

A defect, common to the British Indian Provinces and Mysore, grave from the academic point of view, is the combination of the water rate and land revenue proper.[23] The administrative difficulties involved in the separation of the two, the cost of, and the care attendant on, a suitable machinery for the determination of water rates from time to time, and the long duration of the practice, probably render

[21] Cf. *Indian Journal of Economics*, Vol. XVI, Part IV, "Reform of Land Revenue Assessment: A Punjab Experiment" by P. J. Thomas.

[22] Such loss, for the year 1934-35, has been estimated at about Rs. 13·35 lakhs.

Cf. My unpublished thesis, *The Tax System of Mysore*, submitted for the M. A. Degree Examination of the Mysore University, 1937.

[23] *Report of the Indian Taxation Enquiry Committee*, p. 103.

the theoretic satisfaction of a separate water rate a costly luxury.

But what indeed is a lacuna in the assessment of land in Mysore as in British India, is the absence of any provision for the appropriation of the "Public Value" of building land, specially, in towns and cities. A tax on such unearned increment besides being productive, specially in the rapidly expanding cities like Bangalore and Mysore, is recommended from a distributional point of view also.[24]

5. *Excise on Liquors and Drugs.*

Now to the revenue from Excise on Liquors and Drugs. The income from this source rapidly increased since 1900-01 (Rs. 36·17 lakhs) and reached its peak level in 1920-21 when it amounted to Rs. 77·22 lakhs, since when there has been a gradual fall as noted below:—

Rs. 64·67 lakhs in 1925-26; Rs. 66·54 lakhs in 1930-31; Rs. 49·24 lakhs in 1935-36; and Rs. 48·10 lakhs in 1940-41. The essential spirit of the measure is restrictive in character. The chief drinks and drugs the consumption of which is sought to be minimised are Toddy and Arrack, foreign liquors, Ganja and Opium, the first two being the most significant both from the point of view of revenue and of the extent of consumption. A number of direct executive measures such as the reduction of the number of shops, appointment of Advisory Committees and Licencing Boards, and restrictions as to the location of shops, hours of sale, age and limits of possession and grants to temperance propaganda, are undertaken with the object of regulating consumption. But the chief and the most effective instrument of the regulation of consumption is the two-fold levy: a direct fixed duty at prescribed rates and a variable license fee generally determined by auction. The fixed duty is the primary source of control over consumption, and is to be kept high enough to minimise consumption without encouraging illicit practices. An undue increase in the element of license fees might imply speculative bids on the part of shop-keepers

[24] A. C. Pigou, *A Study in Public Finance*, p. 173.

and attendant demoralisation both of sellers and consumers. The comparatively minor role of the fixed duty in the excise revenue of the state is a matter for consideration and action, though it is in keeping with the prevailing low rates of taxation in Mysore. A system of steep surcharges for every

Percentage of Duty to Revenue.[25]

			Arrack	Toddy
1920—21	...	...	59·2	23·3
1930—31	...	...	49·3	20·9
1940—41	...	...	50·8	24·8

additional quantity of liquor supplied after margins fixed for each area may be enforced, at least in the case of the more harmful arrack.[26]

The dictum of maximum revenue with minimum consumption has often been condemned as an inadequate statement of policy not indicating either the absolute minimum consumption permissible or the maximum of revenue which the state is prepared to collect. In fact, for every given level of consumption there is a maximum revenue obtainable and vice versa. And, it is best to fix the maximum amount of revenue which the Government requires from this source, and then press down the consumption to the corresponding minimum level.[27] In fact, in Sweden the Government's interest in this source of revenue is minimised by a law which allows only a fixed share of these profits for state budget purposes, the balance being assigned to a special

[25] Compare figures for Madras:—

		Arrack		Toddy	
1932—33	...	50·2	(Madras 55·2)	26·0	(Madras 49·2)
1935—36	...	51·9	(57·8)	24·0	(43·3)

[26] The bigger Municipalities are levying a moderate surcharge of 4 as. per gallon on all arrack sold in excess of 65 gallons a month in each shop.

[27] Evidence of Mr. G. P. Hogg, Commissioner of Excise, Bengal, before the Indian Taxation Committee, 1926.

fund.[28] The pursuit of the policy of maximum revenue has at any rate, secured a considerable reduction in consumption[29] as may be observed from the figures below, while experiments in prohibition are also being tried by closing down shops in selected areas.

Incidence of Consumption

(per head per year)

		Arrack	Toddy	Ganja and Opium
		Drams	Seers	Tolas
1920—21 ...	...	3·2	8·7	0·22
1925—26 ...	...	2·3	7·8	0·19
1930—31 ...	...	1·9	5·9	0·13
1935—36 ...	...	1·01	4·1	0·11
Madras ...	...	12·7		

That of the two drinks, arrack and toddy, the demand for the latter is comparatively inelastic is borne out by the data below. And the disparity in the percentages of reduction (as between the years 1920-21 and 1935-36) in revenue from the two sources and revenue from shop rent in each case is quite revealing.

Reduction in Consumption, Revenue and Shop-rent between 1920-21 and 1935-36.

(Percentage)

	Reducation in Consumption	Reduction in Revenue	Reduction in Shop-rent
Arrack ...	64	59·5	38·5
Toddy ...	51·9	24·0	14·3

[28] "Temperance Legislation in Sweden" by Olov Kinberg, in *Annals of the American Academy of Political and Social Science* September, 1932.

[29] Except in the case of foreign liquor the consumption of which has increased from 20,000 gallons in 1920-21 to over 30,000 gallons to-day.

6. *Incidence of Taxation.*

The merits or defects of individual taxes are of less account than the way how the tax system as a whole impinges upon the community. The faculty theory of taxation along with the view that the sacrifice involved in taxation should be as small as possible, points to a high level of exemption and steeply progressive taxation above that limit. At the same time, the springs of capital and enterprise should be left unimpaired. In the resultant compromise, the levy of taxes will have to be so framed that while some portion of the receipts is obtained from a large number of the community, considerably the heavier burdens are placed on the broader backs. The striking of this balance is not easily accomplished in a community of essentially small incomes, and a certain amount of lopsidedness in tax burdens would therefore be inevitable. In Mysore, for example, the chief sources of Public Income such as the Land Revenue, Excise on Liquor and Drugs and revenue from Stamps generally bear upon the poorer sections of society, chiefly the small holders and labourers, Urban and Rural.[30] The duties on Matches and Sugar are contributed by almost all classes, though in the case of Sugar a higher proportion of the revenue is probably obtained from the town-dwellers with a higher standard of living. The Road Traffic Taxes,[31] essentially based on the benefit principle, are in their final

[30] Even assuming that land revenue is the traditional sixth of gross income, 86% of the land revenue for the year 1936-37 was collected from those with a gross income of Rs. 600 per year and less, and 54·2% from those with annual income of Rs. 150 and less. The burden of the revenue from arrack is mostly on urban labour, and that of today is diffused over the rural population.

[31] Under the Mysore Road Traffic and Taxes Regulaton, 1935, are levied a vehicle tax on Motor Cycles, Cars and Lorries used solely for purposes of agriculture, a road tax on motor lorries, a service tax and a mileage cess, in lump sum on the basis of seating capacity, on public service motor vehicles used for carrying passengers. The proceeds, after incidental deductions, are credited to a special Road Fund from which amounts are spent on the construction and maintenance of roads and bridges in the state. The yield from these levies has varied from Rs. 5·55 lakhs in 1935-36 to Rs. 11·20 lakhs in 1940-41.

incidence borne by the richer owners in the cities and the rural classes who make use of the road transport in the mofussil. A large portion of the Income and Super-taxes are paid by companies with a foreign domicile, and a sum of about Rs. 14 lakhs (1940-41) is derived from the richer section in Mysore. Land Revenue, a fixed charge, is, as elsewhere in India, really regressive in character. Thus, with the preponderance of land revenue levied at a flat rate along with an over-gentle rate-structure of income-taxation[32] and the total absence of inheritance and kindred tax measures, the class of wealthy persons consisting of large land-holders, big merchants and the upper grades of professional classes escapes with a comparatively light burden. Again, the small traders in villages and towns and the lower grades of professional classes contribute very little to the state funds.[33] In short, the tax system is incomplete in scope and unequal in incidence, defects even more noticeable in the British Indian Tax structures.

7. *New Sources of Revenue.*

While a readjustment of the tax-system is advisable, there is at the same time a great scope for the development and extension of the tax-resources of the state. Apart from the likelihood of an early or eventual fall or stoppage of income from the sale of liquors and drugs and from the Gold Mining Operations, there is still a great leeway to be covered and much to be accomplished by way of the provision of public amenities and utilities, specially from the standpoint of established western standards which the Mysore State is constantly endeavouring to attain.

Probably the creation of a better standard of life for the masses through increased and improved public expenditure is as effective a method of redressing the inequalities of

[32] The rates of income-tax in Mysore are about half those of British India under the step system. The rate of tax on the income of Companies was raised from 18 pies to 24 pies per rupee from 1st July, 1940, while the rate for the same in British India was fixed at 26 pies under the Finance Act of 1938.

[33] *Report on Taxation in Mysore, by* N. S. Subba Rao, p. 91.

taxation as any. In fact, improving the condition of the people has all along been the anxious care of the Government. Towards this end and in order to reform the revenue system, three types of tax measures might be devised.[34]

*Literacy, Expectation of Life and Expenditure on Social Welfare.**

Country	Literacy (p. c. of population)	Expectation of life (years)	Expenditure on Social Welfare (1933—34)			
			Total Expenditure (Millions)	Expenditure on social Welfare (Million)	percentage of total expenditure	Per capita Rs. a. p.
United Kingdom	76·1	57·6	£ 778	201·8	25·9	57 15 10
United States of America.	74·5	56·5	...	...	..	...
France ...	80·1	50·5	49,883 (Fr.)	6620	13·3	16 14 11
Germany ...	80·5	49 01	6,189	1372	22·2	13 9 7
Canada ...	71·6	...	448·5 ($)	49·7	11·1	13 3 2
Japan ...	71·7	44 5	...	...	...	...
Australia ...		...	£64 7	11 3	17·5	22 8 6
India ...	8	26·7	2053 (Rs.)	154 5	8·5	0 10 5
Mysore ...	9·1	24·77	37·1 (Rs.)	8·12	21 6 (1940-41)	1 3 11 1 8 4

[34] The estimated yield from each of these sources, stated within brackets, is carefully based on data vailable for what may now almost be regarded as a normal year. 1935-36.

*Literacy and expectation of life are computed for the Census years 1930 or 1931. Figures for expenditure on social welfare for foreign countries are taken from Sir M. Visveswarayya, *A Planned Economy for India*, and P. J. Thomas, *Growth of Federal Finance in India*.

The first would bear generally on the richer classes, and would comprise of a recasting of the income-tax, with the application of the British Indian rates as a first step and a lower exemption limit of say Rs. 1500 (Rs. $14\frac{1}{2}$ lakhs),[35] taxation of agricultural incomes (Rs. 2 lakhs); higher rates of Betting Tax,[36] special luxury taxes, inheritance taxation and increased Registration fee on higher value documents (about Rs. 4 lakhs); a tax on House property and on building-lands in the bigger towns and cities (Rs. 4 lakhs); an Employment Tax bearing generally on the higher professional classes (Rs. 5 lakhs); and an Excess Profits Tax on busines undertakings earning a higher rate of return than is economically necessary (Rs. 5 lakhs)[37] in all about 35 lakhs. A second set of taxes would devolve mainly on the middle, the smaller professional and the poorer classes and would consist of an annual License Levy for state purposes on shops of all kinds (Rs. $1\frac{1}{2}$ lakhs); a Tax on Insurance, say, at half of one per cent of the annual premia (Rs. 2 lakhs); a Tobacco Tax and Tax on Aerated Waters (Rs. $7\frac{1}{2}$ lakhs) (in all Rs. 11 lakhs). The final set of fiscal measures would be laid chiefly for their productivity: A well planned Sales Tax (Rs. 16 lakhs), a small terminal tax on Railway and *Bus* Traffic (Rs. $8\frac{1}{2}$ lakhs) and a small addition to the price of electricity (Rs. $3\frac{1}{2}$ lakhs) in all Rs. 28 lakhs.

Thus, while the transference of the burden from the poor to the rich would be both equitable and productive, other measures, notably the Sales Tax, would broaden the

[35] (*i*) With the British Indian Rates and Exemption limit of Rs. 2.000 an additional yield of Rs. 12,50,897 was estimated by Mr. E. DaCosta, a Member of the Mysore Civil Service in his Note on "Income Tax in Mysore" a paper read at the General Meeting of the Mysore Civil Services Association. 20th March, 1937.

(*ii*) A much lower exemption limit of Rs. 1,000 was tried in British India between 1931—36.

[36] A Betting Tax on the lines of the one in Bengal, at $6\frac{1}{4}$% on all moneys paid into the totalisator and paid or agreed to be paid to a backer by a licensed book-maker, is levied since 1934-35.

[37] The assessed income of Companies for 1937-38 was over Rs. 169 lakhs with fairly steep progression, an amount of not less than half the super-tax proceeds may safely be anticipated.

base of taxation and add a desirable element of elasticity to the revenue system of the State. What is more, these tax changes may end what is a curious paradox of the public attitude towards Government in India to-day: of a clamorous consciousness to Twentieth Century administrative standards and a Nineteenth Century reluctance to meet taxation. Nor does the taxation proposed overlook fundamental considerations of taxable capacity. It has been estimated, for instance, that effective taxation in the years 1912-13 and 1922-23 was just 36·3 per cent and 32 per cent respectively of taxable capacity.[38] Since the latter year, however, there has been no substantial increase in tax burdens while the economic development of the state, specially, in recent years is certain to have augmented the taxable capacity of the people.

8. *Relief from the Imperial Burdens.*

The new measures suggested, however, can only be introduced by and by as occasion demands and public temper permits. A few of them might even be a little too much for the popular element which, under the Government of Mysore Act, 1940, is to be directly associated in the administration. The initial timidity on the part of the popular element may wear out only after a period, while in the meantime sources such as the Excise on Liquors and Drugs might be purposed to be sacrified. Under these circumstances, there is only one avenue which could be of succour to the States' Finances, and which could release funds necessary both for the beneficent activities of the Government and for relieving the excessive burden on certain sections of society. The Imperial Government makes a heavy inroad, directly or indirectly, into the resources of the people of Mysore by way of the Subsidy, the Civil and Military Jurisdiction over the Bangalore Cantonment, direct or indirect control over the railway system, maintenance of the Imperial Service Troops, profits from Currency and Coinage, Posts and Tele--

[38] *The National Income and Taxable capacity of Mysore*, by Professor V. L. D'Souza, p. 20. (Reprint from the *Journal of the University of Mysore*, 1928).

graphs, Opium, Salt and Customs. The monetary value of the burden borne by Mysore in these several directions and the benefits which the state enjoys by way of protection and other imperial services have been estimated at Rs. 164·92 lakhs and Rs. 132·26 lakhs respectively.[39] The abolition of the subsidy with the stigma of feudal servility attached to it, and incompatible with the federal principle of equality, would be the first and the most appreciable step. Other measures, such as a return of a moiety of customs and Salt Revenue, might even await imperial necessities.

[39] *Financial Problems of the States in Federal India* by Professor V. L. D'Souza. 1925. pp. 57—62.

A NOTE ON THE FINANCIAL SYSTEM OF HYDERABAD[1]

BY

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Historical Introduction

Hyderabad's finances had a very chequered history in the 19th century. Until 1854, no regular account was kept of the financial resources of the State. There was no Public Treasury.

Reforms were first introduced by Sir Salar Jung I in 1855. He appointed a small committee of two experts under his own supervision, to stabilise the finances of the State. Gradually, far-reaching and comprehensive reforms were introduced. A uniform system of accounts was introduced. Treasuries were opened in the districts and budgetary system was introduced.

Hyderabad has its own currency. In the 19th century the coins used to be made by hand and the system was opened to fraudulent practices. The present century in contrast to the last century marks an era of well organised finances, almost unparalleled in the previous history of any country. This has been made possible by a brilliant succession of finance members namely, Sir Casson Walker, Sir Bertand Glancy, and the Right Honourable Sir Akbar Hydari.

In 1902, the late Sir Casson Walker became the Finance Minister. He was alive to the difficulties and draw-

[1] I have to acknowledge with thanks the willing help which I received from Mr. Liakatulla, Finance Secretary, who, in spite of pressure of work, in connection with the preparation of the Budget, was kind enough to discuss number of matters with me and also permitted me to make use of the note on "Departmentalisation of Finances."

backs of hand-made currency coins. His first act was to set up an up-to-date mint, to coin machine-made rupees. The result was that hand currency was altogether eliminated and an era of sound currency set in. In 1910 he was succeeded by Sir Bertand Glancy. This was an era of rising prices and prosperity. The income of the Government was increasing. Therefore, it was possible to make all-round improvements and to set the finances on stable basis.

When Sir Akbar succeeded as Finance Member he introduced very far-reaching and comprehensive reforms. The classification of the budget heads of receipts and disbursements were revised, "in such a way as to exhibit each class in its true prospective, and different financial investments were earmarked under separate reserves according to the resources from or the objects for which they have been constituted." It is not possible within the course of this paper to enumerate the various very useful reforms which Sir Akbar introduced during his long-term of office 1922-36 as Finance Minister. I shall only describe his most two famous reforms. The first is known as the Departmentalisation of Finances. This Scheme has earned a world-wide reputation for Sir Akbar, and he is rightly regarded as a great financial genious. It is due to his far-reaching foresight that Hyderabad has most stable finances and was perhaps the only country in the world which passed through the last great depression without any unbalanced budget and curtailing of expenditure on productive works.

As I regard the Scheme of Departmentalisation highly scientific and of immense value to the provinces in British India, I reproduce it below:

The main ideas of this Scheme were formulated in the following paragraphs, when Sir Akbar Hydari presented his first Budget Note for 1331 Fasli (1922 A.D.) on appointment as Finance Member. He observed:

"I shall try to eliminate as far as possible, from the ordinary revenue and service expenditure of the State, purely temporary items of expenditure and especially those which should not genuinely be considered as such. For example, receipts on account of sale of funded investments, like Government Promissory Notes might swell the cash balances of the State, but being at the expense of our invested balances their inclusion would distort a correct

of our revenue income. Similarly, the profits from Osmania sicia coinage, which formerly used to be invested in a separate reserve (the Kalder Reserve), cannot be depended upon as a regular source of income, and, cannot therefore be treated in the accounts as an ordinary sources of revenue. On the other hand, meeting the whole of the famine expenditure of the year in which the famine, after a cycle of years, happens to occur, abnormally exaggerates the position, as regards expenditure, of that year.

Departmentalisation of the Finances

"One of the problems, to which the Financial department proposes to address itself in the coming year, is the revision of the classification of the heads of receipts and disbursements in such a way as to exhibit each class in its true perspective and to earmark the different funded investments onder separate reserves according to the sources from, or the objects for, which they have been constituted. There is also another object in view in this revision and that is, what I might call, the Departmentalisation of the Finances. In a passage that has become classic, Sir John Strachey showed how before the provincialisation of the finances in British India, it was the Province that cried the loudest, and not the one that deserved the most, that got the largest share from the common treasury of India.

"The local governments had no means of knowing the measure by which their annual demands upon the Government of India ought to be regulated. They had a purse to draw upon of unlimited, because unknown, depth. They saw on every side the necessity for improvements, and their constant and justifiable desire was to obtain for their own province and people as large a share as they could persuade the Government of India to give them out of the general revenues of the empire. They found by experience that the less economy they practised and the more importunate their demands, the more likely they were to persuade the Government of India of the urgency of their requirements.

"Applying this analogy of the *Provinces* in British India to the different *departments* of this State, giving the most to the department that cried the most was a policy which led to no practical difficulties when as ten or even five years ago, a surplus of over a crore or even a crore and a half out of a total revenue of between five and six crores was a normal feature of the State Budget. But this has become impossible now. The policy, that suggests itself to me as the best at present for adoption, is to fix the total grant of each department for a number of years and give it a large measure of autonomy within that grant, subject of course, to such general restrictions as are necessary to avoid any undesirable developments or precedents, and subject also to

a rigid and really effective audit. The department must carry out whatever measures of reform it might desire to institute within this grant. If it happens to have any proposals for capital expenditure, it must provide, within its grant, for the amount of interest charges, incurred by the State in financing it. If after such allocations of the ordinary income among the different departments and making due provision every year for the formation of specific reserves for such classes of expenditure as, like famine, come inevitably but after a cycle of years, there happens to be a surplus it would be the happy privilege of the Finance department to suggest how that surplus could be most profitably distributed, the first claim on it ordinarily being that of the department contributing to its creation and then of development departments like Education, Sanitation, Commerce, Industries, Irrigation and Communications, that promote the mental, physical and economic efficiency of the people. Until, however, such a surplus is actually in the coffers of the State, the Members in charge would be trusted to see that the expenditure is kept from year to year within the grants fixed for them for a definite period."

The scheme was sanctioned in 1331 F. and the following gives the latest version of the rules as passed by the Executive Council of His Exalted Highness the Nizam's Government and subsequently amended:—

I. The grants allotted to each department shall be fixed for three years beginning from 1332 Fasli provided—

(a) if any particularly adverse conditions like Famine or severe scarcity arise, they will be liable to curtailment,

(b) if there is any increase at the end of the year over the Normal Receipts the excess will be distributed by additional allotments to the different departments in such a way as Government may decide.

II. Each of the spending departments noted in the margin will be entitled to spend in addition to its normal grant any increase in its Receipts and the proceeds of any fees or cess, etc., that may be imposed lawfully for the service of that department.

Post office and Departments under "F" Administration.

III. A department may be given in special circumstances a special allotment for expenditure in advance, if the Government is satisfied that the Expenditure will be covered by a corresponding increase in the Receipts.

IV. Each of the commercial and quasi-Commercial departments mentioned in the margin shall have at its disposal :—

Printing, Electricity, Telephone, Industrial Concerns, Jail Industries, Stationery Depot.

(a) its normal net grant, if any is fixed,

(b) and the Receipts earned by it, out of which it will have

(*i*) to defray all working expenses

(*ii*) provide for suitable depreciation

(*iii*) pay to Government interest at 5 per cent. on the total Capital-at-charge. From the balance left it will pay such profits to Government as the circumstances of the department permit.

V. Every expenditure will be subject to Budget provision. Expenditure in excess of the normal grant will be allowed either in the circumstances mentioned in Rule III or if the department has an equivalent amount of surplus balance at its credit brought over from the previous year. Expenditure sanctioned by His Exalted Highness without the Department initiating the proposal will be chargeable to the savings of the department but if there are not sufficient savings after providing for previous commitments, the department will be entitled to a corresponding addition to its normal grant in excess of budget provision.

VI. Percentage and scale charges payable under the rules on revenue collected, as also refunds, rebates, and remissions of excess collections shall not be subject to Budget provision.

VII. The Savings from Departmental grants shall be placed at the credit of the department concerned for expenditure during the years of the contract, and at the end of the third year, one-half of the amount of the unexpended surplus of each department will be carried forward to its credit for the next period of the contract but the savings by reduction under the following heads will lapse entirely to Government :—

1. Mansabs and special allowances.
2. Yomias, Mamuls (not conditional on performance of service.)
3. Rusums.
4. Reductions under Irregular Troops.
5. Tahrir of Sarishtadars.
6. All sinecure allowances,

VIII. If any department desires an increase for its capital beyond the capital grant already sanctioned, it must provide within its grant, *i.e.*, from its receipts, for the amount of interest at 5 per cent. on the whole capital inclusive of the old as well as the new capital claimed. This will be the first charge on its gross Receipts.

IX. The charges under Salaries and Allowances, Contingencies, and Supplies and Services, shall be regulated by the scales, rules and regulations in force from time to time.

X. The departments will have full powers of inter-appropriation of grants under Contingencies and Special Charges (Supplies and Services) excepting the grants mentioned in Rule VI. They will also have power to reappropriate from Contingencies and Special Charges to Travelling Allowance and Tour Charges.

XI. The savings under Salaries and Personal Allowances on account of appointments unfilled shall not be appropriated for the payment of arrears of pay or temporary appointments not costing creation of permanent appointments, but may be utilised from the more than the amount. Permanent reduction in establishment below the cadre fixed by Government on the recommendation of the Salaries Commission can be appropriated for the creation of new appointments as well as for increase in contingencies, special charges and other improvements of the department.

XII. The Allotments for Travelling Allowance and Tour Charges and also for the provision for work under Forest, Buildings and Communications, Irrigation and Public Improvement and grants for petty construcion and Repairs placed at the disposal of each department shall not be appropriated for salaries and contingencies except with the express approval of the Finance Department, which will be accorded only in very exceptional circumstances."

Receipts and Expenditure

The total normal income of Hyderabad State is a little over 9 crores of rupees.

Following are the main heads of income according to the latest budget—1940.

Land Revenue	...	...	3,10,00,000
Excise	...	...	1,75,00,000
Railways	...	...	1,35,00,000
Customs	...	...	1,20,00,000

Owing to lack of space it is not possible to give a list of expenditure in this paper. But it must be mentioned with great satisfaction and pride that a very considerable part of this expenditure is being spent on nation-building departments. It spends more than 10 per cent. of its income—over a crore of rupees on education. This figure is not even closely approached by any province in British India.

Permanent Reserves

The second most important contribution of Sir Akbar to the State finances of Hyderabad, when he came to the helm of financial affairs, was to earmark the different founded investments under separate reserves according to the sources from or objects for which they were constituted. Following are the principal reserves:

Debt Redemption Reserves

The public debt of Hyderabad is about $7\frac{1}{4}$ crores of rupees. The principal and the interest of this debt are secured on the revenues and the assets of the State. In order to repay these loans sinking fund has been established. The reserve has at present Rs. 3,37,53,768 to its credit which sum is invested in approved securities.

Famine Reserve Fund

In a country which is subject to the appearances of famines like the trade cycles, it is essential that in good years, provisions must be made for the bad times. With this end in view, the State earmarks a sum of 15 lakhs each year. It has been estimated that the cost to mitigate the effects of famine amounts to about 3 crores in twenty years. The Famine Reserve Fund at present has Rs. 2,93,37,688 to its credit.

Industrial Reserve

This Fund has been established to invest moneys in industrial concerns. The total assets of the fund at present are Rs. 2,19,15,561.

Industrial Trust Fund

This is a special branch of the Industrial Reserve. It was decided that a sum of 1 crore must be accumulated to finance industries of Hyderabad. This Fund has been instrumental in bringing about a number of new industries and in developing some old ones. The Fund has about 90 lakhs of rupees to its credit.

Osmania Sicca Stabilization Reserve

Hyderabad has a currency of its own. It is linked up with the British India currency by an exchange ratio which has been fixed at 116-10-8 O.S. = 100 B.G. But this ratio once used to fluctuate very widely. Now the State has fixed the limit of fluctuations. The upper and the lower limit being 118—12 and 115-10-0. In order to stabilize the ratio within these limits a fund has been set up under the name of O.S. Stabilization Reserve. If the market-rate of exchange varies from the rate fixed by the Government, the State undertakes to buy and sell exchange at the rates fixed by it and, any losses that may arise from such transaction are made good from the funds of this reserve which stands at Rs. 3,61,622,341. The Fund has been built out of the profits which arise due to the coining of the O.S. rupees which like the British Indian rupees are token coins and their market-value is far above their intrinsic value.

Paper Currency Reserve

Hyderabad is the only State in India which has a paper currency of its own. The note circulation being over 16½ crores of rupees. Section (9) of the Hyderabad Paper Currency Act (II of 1327 Fasli) provides that not more than one third of the total value of currency notes in circulation, may, in lieu of cash, be kept in securities of the Government of India or in other approved securities. Therefore, about 5 crores of rupees have been invested in approved securities, which yield an income of about Rs. 25 lakhs.

Deposits and General Reserve

The Government receives deposits[2] in the State Post Office Saving Banks and also for payments towards Provident and Insurance Funds. In order to safeguard these funds the above reserve has been established whch has Rs. 64½ lakhs to its credit.

Departmental Reserves

In addition to these reserves each major department has its own reserve, the proceeds of which are utilized for all these expenses which have not been provided in the past budget. This insures smooth expenditure and the activities of the departments are not unduly hampered, due to lack of provision in the current budget. The total amount of departmental reserves which have been accumulated from the past savings is Rs. 189·94 lakhs.

SUMMARY

[In this paper I have described briefly the history of Hyderabad's finances from the middle of the 19th century.

Hyderabad is the only State in India which has a complete currency system of its own, and issues currency notes of all denominations. The exchange rate between Hyderabad rupee, which is popularly called Hali or Osmania Sicca and British rupee which is popularly known here as B.G. or Kaldar, is 100 O.S.=116-10 B.G.

From the issues of paper currency, H.E.H. The Nizam's Government derives a profit of Rs. 25 lakhs every year.

In order to stabilize the exchange rates, the Government has created a special reserve, called the Osmania Sicca Stabilization Reserve.

Hyderabad has an annual income of over Rs. 9 crores. More than 10 per cent. of this income is spent on education—the highest percentage in the whole of India.

The financial system of Hyderabad has been built on very sound lines and owes incalculable debt to the genius of the Right Honour-

[2] Hyderabad has a postal system of its own.

able Sir Akbar Hydari who was Finance Minister for 14 years. The two most outstanding reforms of Sir Akbar are:

(1) The departmentalisation of finances.

(2) The creation of special reserves.

These two reforms have been described at some length in this paper and their adoption has been recommended for British Indian provinces and other states.]

SOME ASPECTS OF PROVINCIAL FINANCE

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Some of the outstanding and significant features of the provincial budgets, during the last four years, are that most of the provinces have had almost balanced budgets; both the income and expenditure have expanded, and the expenditure on the social services have increased both absolutely and in relation to expenditure on security services.

All Provinces (in lakhs of rupees)

	1936-37	1938-89	1939-40 (Revised)	1940-41 (Budget estimate)
Revenue ..	8258	84,92	89,82	90,87
Expenditure ...	8208	85,83	90,77	91,15
Security services	27,36	28,17	28,95	29,00
Social services	19,46	21,77	22,94	23,60

It is true, as is obvious from the table above, that the provincial expenditure on social services has increased by Rs. 414 lakhs between 1936-37 and 1940-41; yet it is equally true that this increase is inadequate in relation to the needs of the people. The Provincial Governments are still spending a good deal more on the security than on the social services and this is so in spite of the fact that most of the revenue of the Central Government is spent on the maintenance of the security services. The table below gives the expenditure of the various provinces on the security and the social services during the last three years.

(In thousands of rupees)

	1938-39		1939-40 (Revised)		1940-41 (Budget Estimate)	
	Security	Social	Security	Social	Security	Social
Madras ...	5,72,68	4,62,68	5,75,48	4,68,83	5,80,69	4,80,60
Bengal ...	5,24,74	2,03,06	5,45,83	3,27,39	5,59,00	3,75,76
Bombay ..	3,15,82	2,97,47	3,24,98	3,23,48	3,19,03	3,32,50
U. P. ...	4,08,59	3,54,67	4,24,37	3,84,73	4,26,21	3,85,81
Punjab ...	3,31,38	3,22,03	3,33,70	3,28,65	3,34,17	3,45,88
Bihar ...	2,04,50	1,36,08	2,22,86	1,49,75	2,13,00	1,58,41
C. P. ...	1,62,68	96,76	1,61,81	98,47	1,61,72	99,55
Orissa ...	61,19	44,04	61,52	47,86	61,87	48,01
Sind ...	83,42	52,10	86,34	56,18	88,43	56,64
Assam ...	79,86	70,73	82,66	69,12	80,86	76,12
N. W. F. P.	72,13	37,12	76,05	40,20	75,14	40,93

Bombay and the Punjab are the only two provinces where the Governments are spending more on the social than on the security services. In U.P. and Assam the security services cost about 10% more than the social services. The conditions in the North Western Frontier Province are abnormal and the expenditure on security services must be very high. In Bengal and C.P. the security services cost 60% more than the social services. We find that the social services are as yet little developed. The standard of living in our country is very low. There is unlimited scope for the development of education, public health, agriculture, water supply, means of communication etc. These facts are too well-known to need any emphasis. It is, however, often urged—and urged with a good deal of emphasis—that the resources at the disposal of the Provincial Governments are far too meagre and limited to enable them to render these services on any adequate scale; that the Government of India Act, 1935 has definitely limited the fiscal powers of the provinces and that the people are poor and their taxable capacity is very low.

The purpose of this paper is to examine how far the financial resources of the provinces can be increased, so as

to enable them to develop the social services, with a view to raising the standard of living of the people. Broadly speaking there are three ways in which the provinces can improve their financial position. They should press the Government of India to place more resources at their disposal. They should retrench existing expenditure. They should raise more revenue by additional taxation. It is proposed to examine these possibilities.

There does not seem to be any possibility of the Central Government placing more resources at the disposal of the provinces now or in the near future. However high the military expenditure may be in relation to the wealth of the country, in the world in which we live to-day, it does not admit of any reduction. Possibilities are in the other direction, namely, that it is very likely to be much more than what it is at present. I am, however, in this discussion, not taking into account the heavy additional expenditure due to the present war. This is the hard fact and we must not shut our eyes to it. There is scope for retrenchment under the head 'Civil Administration'. Even if the Centre is democratised and the services are reorganised, the savings due to re-organisation will, to a considerable extent, be absorbed by the extra expenses involved in the Reforms. Moreover, it will take some years for the reduced salaries at the Centre to make themselves felt in the budget. Therefore, we have to dismiss the possibilities of the Centre placing more resources at the disposal of the Provinces in the near future.

There are, however, certain taxes which are to be levied and collected by the Centre for the benefit of the Provinces and there are very good reasons why the Provinces should press for their imposition. The most important among them is the Succession duties on property other than agricultural land. The Provincial Legislatures have the power to impose succession duties on agricultural land. The case for the imposition of succession duties in our country is very strong. It is a direct tax and can be graduated on the model of Death Duties in England. The burden will be on those who are in the best position to bear it. It satisfies the canons of equity and productivity. It was unfortunate that our Provincial Governments did not press for its imposition.

It will, however, be very unfair for the Provinces to impose it on agricultural land and leave other properties unaffected. This may yield an income of about 5 crores every year.

The 1935 Act provides that the whole or a part of the proceeds from the duties on salt and federal excise duties may be distributed among the provinces. Under the existing conditions, as pointed out before, it is not feasible for the Central Government to part with any portion of the proceeds from the Central excise. But the Provincial Governments can press the Central Government for increasing the rate of duties in the case of certain commodities like sugar (with the corresponding increase in the import duties), matches and kerosine oil, and for the distribution of the additional proceeds among the provinces. No doubt excise duties are regressive in character and the effect of the above proposal will be a burden on the poorer section of the community. But there are very valid and cogent reasons why we should have recourse to them. In our country the vast majority of people have small incomes and the only way to reach them is through indirect taxation. The scope for the imposition of direct taxes in the provinces is limited and it is suggested that recourse should be had to indirect taxes only after exhausting the possibilities of direct taxes. Even in countries like England the relative importance of indirect taxes (customs and excise) have been increasing during the last ten years. Finally, it is assumed that proceeds from these taxes will be spent only on the economic and social welfare of the common people. If, therefore, the common people who will bear the greater burden of increased excise duties will also get most of the benefits from the proceeds of these taxes, and provided the advantages conferred on them by State expenditure are greater than the disadvantages caused to them by taxation, then the objection against imposition of such taxes loses its force. We may also note that mill-manufactured sugar is mostly consumed by the middle and richer sections of community and therefore the burden of the excise duty on sugar will not be on the poorer sections of the community.

The recent changes in Otto Niemeyer Award regarding the allocation of income-tax proceeds between the Centre and

the Provinces have been very unfair to the provinces. It was very probable that by 1941-42 the Centre would have got its 13 crores from its own shares of income-tax proceeds together with the contribution from the Railways, and that the Provinces would have received their full quota of 50% of the divisible part of income-tax. Under the New Order, the provinces will lose $4\frac{1}{2}$ crores in 1941-42 and in each of the succeeding years this loss will be reduced by one-sixth. The only justification for the New Order—and there is a good deal of force in it—is that the Centre has been faced with very heavy expenditure due to war. If, however, the war comes to an end in the near future the provinces will have a strong case for the immediate surrender by the Centre of the retained portion of the provincial share of income-tax.

The scope for any drastic retrenchment in the provincial expenditure is really very limited. Some of the services have been given constitutional protection and their scales of pay are beyond the powers of the provincial legislatures. Other services have been re-organised and scales of pay considerably reduced. In some cases the enthusiasm for economy has carried the pendulum to the other extreme. These changes will, however, take some years to make themselves felt effectively. As against this there has been an increase in expenditure due to the introduction of Provincial Autonomy. In conclusoin, we may therefore note that Provinces cannot hope to release resources to any considerable extent for social services by the process of retrenchment and economy under the present order.

We are now left with the third possibility—scope for the imposition of additional taxation by the Provinces under the Act of 1935. The new taxes which have already been imposed by some provinces or which can be imposed are, tax on Agricultural Income, General Sales Tax or the Selective Sales Taxes, tax on Amusements and Entertainments, tax on Employment and Property Tax. There are some other minor taxes which have been imposed but the yield from these is small.

The case for the imposition of a tax on Agricultural Income is so obvious and patent that it is surprising why

most of the provinces have not had recourse to it. The only two provinces which have imposed it are Bihar and Assam. In Bihar the exemption limit has been unjustly fixed at Rs. 5,000 while the rates of the tax are rather low. There is no justification why these rates should be lower than those of the general income-tax. This is a tax on *net income* and therefore the question of agriculture being a depressed industry is irrelevant. A few calculations will illustrate the loss to the Bihar Provincial Exchequer due to this rather low rate.

An income of	At Bihar rate	At General income Tax rate
Rs. 5,000 will pay	Rs. 156	Rs. 164
Rs. 10,000 " "	Rs. 312	Rs. 555
Rs. 15,000 " "	Rs. 546	Rs. 1180
Rs. 20,000 " "	Rs. 833	Rs. 1961
Rs. 25,000 " "	Rs. 1302	Rs. 2742
Rs. 30,000 " "	Rs. 1562	Rs. 3523

It is estimated that in Bihar this tax will yield about Rs. 14 lakhs in 1940-41 while in Assam Rs. 25 lakhs per year. The Assam rates are the same as the general income-tax rates. If Bihar adopts the same scale of graduation and the same exemption limit as have been adopted in the case of general Income-tax, the annual yield will be about Rs. 45 lakhs a year. Taking all the provinces together, an income of Rs. 4 crores can easily be expected from this source. The imposition of this tax will not only remedy the regressive character of the existing Provincial tax system, but will also counter-balance the regressive effects of indirect taxes to which the provinces must have recourse to increasing extent in future.

Should agricultural income be liable to super-tax? On general considerations, there is no reason for any distinction between agricultural and non-agricultural incomes. The Bihar and Assam Acts do not provide for super-tax. A graduated rate of super-tax, on the same basis as the general super-tax, should, in all fairness, be imposed in all the provinces.

A number of Provinces have imposed either General Sales or Selective Sales taxes. Madras is the only province which has imposed General Sales Tax in 1939. All the provinces except Orissa have imposed sales tax on motor spirit. Some provinces have imposed sales tax on tobacco and articles of luxury. Governments of Bengal and the Punjab are contemplating the imposition of General Sales Tax.

The case for the imposition of General Sales Tax in the provinces is very strong under the present circumstances. It will be a productive and elastic source of revenue. It is not likely to affect adversely to any considerable extent the trade, commerce or industry provided the rate of tax is not unduly high. After the war of 1914—18 a large number of countries in Europe and America have imposed Sales Tax and the general impression is that it has not stood in the way of the development of the internal trade or commerce of those countries. The most equitable way of taxing the general mass of the people is either through the excise or through the general sales tax. Sales tax will affect the largest number of people but to a very limited extent. It has been a very handy and reliable source of revenue in other countries and there is no reason why it should not be equally successful in ours. The most telling argument against its imposition is its regressive character. There are, however, some important considerations which outweigh the objections based on grounds of its regressiveness.

The Provincial excise revenue (from intoxicants) is far more regressive than a general sales tax. The former affects a small number of people to a large degree. The whole burden of the excise revenue is at best on not more than 10 to 15% of the population—people whose earning capacity is very low and who are among the poorest in the country. They are least able to bear this burden. It was quite convenient in the past to say that the policy of the Government in this matter has been one of the maximum income with minimum consumption. If, however, drinks are bad, the best way to check the evil is not by making the poor still poorer by imposition of heavy tax, but by complete prohibition. If equity and justice are to be the criteria of

taxation, the case for prohibition seems to be unassailable. The various Provincial Governments should be able to recoup the whole loss arising from a policy of prohibition from the General Sales Tax. It is only fair that the burden which is to-day borne by 10 to 15% of the people should be distributed over the whole population.

The second consideration is that certain articles of luxury or of semi-luxury class, or articles which are mostly consumed by the middle and richer sections of the community, should be selected and made subject to higher rates of taxation. This has been done in other countries and the administrative difficulties have been surmounted. Some of the Provincial Governments have already imposed selective sales taxes. Motor spirit and lubricants, tobacco, radio and musical instruments, silk, motor cars, motor cycles, cycles, tea and coffee should be subjected to higher rates of tax than general commodities. Most of these are consumed by rich and middle classes. If these suggestions are accepted, sales tax will lose much of its regressive character.

A sales tax on tobacco merits a special reference. Consumption of tobacco is a typical instance of a conventional luxury widely consumed and it is an article the consumption of which can be varied greatly according to the means of the consumer. A tax on tobacco will not adversely affect the efficiency of the people. It will be a productive and elastic source of revenue. In almost all the countries, there is an internal tax on tobacco. In both C.P. and Madras this tax has been imposed in 1939 on manufacturers and on wholesale and retail dealers. The question of the creation of a state monopoly and the production of tobacco under license should be seriously examined. This is likely to yield, if properly managed, a substantial revenue to the provinces. The preventive staff employed for enforcing prohibition can be utilised for this purpose as well.

The Government of Bombay have imposed a tax on the annual value of immovable property in Bombay city and Ahmedabad. Properties yielding less than Rs. 2,000 per year pay 5%, and above Rs. 2,000 pay 10% of their rental value. It is yielding about Rs. 110 lakhs per year. The chief and the most important source of revenue of most of

the municipalities in India is a tax on the annual rental value of immovable property. Their resources are slender and meagre. The standard of services rendered by them and the amenities provided for the citizens are far below what one finds in modern countries of the world. It is, therefore, highly desirable that this source of revenue should be left completely to the municipalities. It is regrettable to find that the Provincial Governments have treated the local bodies in matters of finance in a much worse way than they themselves were treated by the Central Government even under the Montford Reforms. A tax on Entertainments and Amusements should also be allotted to the local bodies.

The Government of India Act, 1935, permits the Provinces to levy a tax not exceeding Rs. 50 per annum on profession, trade, calling and employment. The Governments of Bengal and C.P. have imposed this tax. All persons assessed to income-tax have to pay a license fee of Rs. 30 per year in Bengal and Rs. 28 per year in C.P. for being engaged in any trade, profession etc. On general principles such a tax should be imposed. This will mitigate to some extent the general regressiveness of our tax system as a whole. If considered desirable, this tax may be graduated by fixing the license fee at Rs. 30, Rs. 40 and Rs. 50 for varying incomes. Income below Rs. 2,000 should however be exempted. This may yield an income of about Rs. 70 lakhs per year.

We are therefore led to the conclusion that there is considerable scope for augmenting the resources of the provinces. The imposition of Agricultural Income-Tax and Super-Tax, Death Duties and a tax on Employment, Profession Trade and Calling will fall on the shoulders of those who are best able to bear the burden. These are direct taxes and should be graduated on well recognised principles of equity. It is a matter of surprise that most of the Provincial Governments have neglected precisely these sources of revenue so far. These are likely to yield an annual revenue of about 10 crores of rupees per year. The provincial excise revenue from intoxicants has been shrinking during the last 4 years, owing to the deliberate policy of prohibition which the majority of the Provincial Governments have

adopted. The revenue fell from Rs. 1,407 lakhs in 1936-37 to Rs. 1,175 lakhs in 1939-40. It has already been pointed out above that the provincial excise tax is far more regressive than a general sales tax, and thereore on grounds of equity and justice a policy of complete prohibition should be adopted. This loss of Rs. 14 crores (I am taking the 1936 figures and therefore omitting recent income from sales taxes) due to prohibition should be made up by the imposition of a general sales tax supplemented by higher rate of tax on selected articles. Finally, it has been suggested that the Central Government should be approached to increase the rate of excise duties on sugar, kerosene and matches for the benefit of the provinces. Cessation of war ought to increase the provincial resources by 4½ crores per annum, or, at the worst, it will take the provinces six years to get this amount in full. In all, therefore, the provinces may hope to have an additional 20 crores of income per year either now or in the near future. The burden on the people will be considerable, but the consolation should come from the fact that most of it will be earmarked for the economic and social welfare of the common people in order to raise their standard of living to increase their money income.

A word of caution is necessary. Some of our Provincial Governments have spent their increased resources during the last 4 years in a haphazard manner. The more pressing needs of the people have been ignored for schemes of doubtful utility. What is wanted is a well thought out comprehensive programme which will directly improve the economic and social conditions of the people, otherwise there is no case for imposing additional burdens on the people. It is surprising to find how large amounts of money provided for development schemes have either lapsed or remained partly spent during the last two years for want of proper schemes.

SUMMARY

[The provinces in India have had almost balanced budgets during the last four years. Expenditure on social services has increased since 1936-37 but this increase is not adequate. Pro-

vinces must have more resources in order to raise the standard of living of the people. Government of India are not likely to place more resources at the disposal of the provinces. The scope for retrenchment and economy in the provinces is very little. Therefore, the provinces must have recourse to increased taxation. Income-tax and Super tax on agricultural incomes, death duties, tax on trade, employment and professions should be levied in all the provinces. A policy of complete prohibition should be adopted as the burden of excise duties on intoxicants is only on 10 to 15% of the people and the loss arising from the same should be made up from General and Selective Sales taxes. Further, the provinces should press the Central Government for raising the existing rates on central excises and should demand that net proceeds from these increased rates should be distributed among the provinces.]

FINANCIAL PROBLEMS UNDER PROVINCIAL AUTONOMY

BY

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Financial Autonomy

The subject of provincal finance has gained a fresh importance and significance since the inauguration of provincial autonomy under part III of the Goevrnment of India Act, 1935 on 1st April, 1937. The event had a direct and double bearing on provincial finance: (1) It defined and demarcated the respective powers and functions, and in particular the respective spheres of taxation, of the Centre and the provinces and conferred wider powers of borrowing on the latter. Altogether it made for greater political and financial independence of the provincial units from Central control than had existed at any time before. (2) Within the provinces, there was a transfer of political power in a wider measure from the bureaucracy to the people. Provincial Governments became at once less subject to Central control and more subject to popular control: political autonomy had its counter-part in financial autonomy which likewise meant the substitution of a greater measure of democratic control for control from the centre, (particularly in respect of new taxation and borrowing).

In this paper a survey is made of a few of the fundamental features of provincial finance, of some trends of financial developments in the Indian Provinces as well as of the more outstanding problems that have presented themselves recently.

The Background of Provincial Finance: the Paradox of Poverty.

At the outset it is well to note a fundamental fact which conditions and characterises the present state of public

finances of this country, whether of the centre or of the provinces. It is the great poverty of the Indian tax-payer. *The financial resources of a State are lnmited by the economic resources of its people.* If the vast majority of the people are unable to do more than meet the bare necessities of life, the State, too, could hardly do more than find money for the elementary functions of Government—the functions of external defence, and internal law and order, of civil administration and justice.

Even as the inhabitants are only able to meet their compulsory needs, if that, and have to forgo satisfaction of their optional wants, so the State has to be content for the most part with performing what are known as obligatory functions and to devote relatively much less attention to the so-called "discretionary" duties in the way of promoting education, sanitation, public health, medical relief, economic development of rural areas and of industries. This, I consider, is a large part of the explanation for the oft-noted neglect of the nation-building services in the scheme of expenditure of the provincial Governments. All the same it is a tragic paradox with which we are faced in India: there is a fair consensus of informed opinion that a higher standard of living for the mass of the people can be rendered possible only by a considerable increase in public expenditure (and, therefore, in taxation),[1] but increased expenditure (and taxation) is inhibited by general poverty and a low standard of living.

One of the major tasks before provincial governments is to break through this vicious circle and to substitute for it a virtuous spiral of better conditions of living for the population and more prosperous finances.

[1] There can be little doubt that, in conditions such as those which now obtain in India, it should be possible to stimulate production and to increase the welfare of the people by public expenditure designed to give greater economic security (by irrigation works, improved and more varied methods of cultivation, etc.), better physical well-being (sanitation, water supply, improved public health, etc.), and education. Indeed, taxation may be only practicable means of creating a better and more secure livelihood. But, in order to achieve this, the proceeds must be wisely spent." (Sir Walter Layton in the *Report of the Simon Commission*, Volume I).

Two-fold Problem

The popular character of the provincial governments (popular government stands suspended in seven provinces, but the present situation is, nevertheless, distinguished from that existing before 1937 by the fact that the people of these provinces have it in their power now, should they choose, to assume the reins of Government and exercise their 'sovereign' authority) presents a two-fold problem in the financial field, *viz.*, (1) to readjust the provincial tax systems with a view to distributing the burdens of taxation more evenly over the population, and (2) to widen the bounds of state beneficent activities; both these ends require considerable enlargement of the financial resources of the provincial governments, on which a further heavy strain is imposed by the demands of the War situation.

I

We may proceed to consider the various measures adopted by Provincial Governments during the last three and a half years of the working of provincial autonomy to augment their revenues and the further possibilities in that direction that may yet be tapped.

Measures of Increased and Fresh Taxation in the Provinces

A tax on agricultural incomes has been imposed in Bihar (1938); the rates of stamp duty have been enhanced in Bombay (1939), the United Provinces (1938), the Central Provinces (1938), Bihar (1937) and Assam (1937); the rates of court-fees have been revised in an upward direction in the United Provinces (1938) the Central Provinces (1938) and Bihar (1938); measures have been taken to extract more money out of imported foreign liquor licensees and to levy permit and gallonage fees on direct imports of foreign liquors by private individuals in Madras, the U.P. and N.W.F.P.; a duty has been levied on admission to entertainments in Bihar (1937), the United Provinces (1937), North West Frontier Provinces (1937), Madras (1939) and Assam (1939) following the earlier example of Bengal (1922),

Bombay (and Sind) (1923), Madras (1926) and the Punjab (1936); a tax has been levied on betting at race-courses in the United Provinces, Assam and Sind, after the lead given by Bengal (1922), Bombay (1925) and Madras (1935); legislation has been passed in the Central Provinces (1939) for the purpose of taxation of motor vehicles, which were already taxed in the three Presidencies and the United Provinces, the Punjab and Assam and N.W.F.P.; the rate of taxation of electricity has been increased twice in Bombay, from 6 pies to 9 pies per unit, (1938) and later to 15 pies per unit in certain areas (1939), while a tax on the sale of electrical energy has been imposed in Madras,—an Electricity Duty had already existed in Bengal since 1935; the Tobacco Vend Fees Act, 1938, has been passed in the North West Frontier Province on the lines of the existing legislation in Bombay (1857), Bengal (1935) and the Punjab (1936), while an *ad valorem* tax on the retail and wholesale states of manufactured tobacco, with provisions for licensing of the traders, has been levied in Madras (1939) and the Central Provinces (1939); a law has been enacted to regulate (through license fees) the trade of dealers in cloth within the Province of Madras; a flat rate tax of seven rupees a quarter on all income-tax payers as a tax on professions, trades, calling and employments has been levied in the Central Provinces and Bengal while a much more ambitious measure, the U.P. Employment Tax Bill, was rendered illegal through an amendment of the Government of India Act, 1935, by Parliament; the Central Provinces and Berar Sales of Motor Spirit and Lubricants Taxation Act, 1938, the legality of which was disputed by the Government of India before the Federal Court, but was upheld by the latter, was followed by legislation in most provinces for the taxation of motor spirit and in some cases of lubricants; the Assam Sales Tax Act, 1939, for the taxation of certain specified luxury goods remains on the statute-book without being put into force; a far-reaching measure of considerable fiscal significance—the Madras General Sales Tax Act, 1939, has been enacted and put into operation; another very important Act is the Bombay Urban Immovable Property Tax Act, 1939, which makes a substantial charge of 5 to 10 per

cent on the annual rental value of lands and buildings in certain urban areas in Bombay; important fresh taxation measures are on the anvil in the Punjab relating to taxation of electrical energy, general sales or turn-over and urban immovable property.

Diversification of Taxtion

Altogether one important result of the action of provincial governments has been to make the provincial tax systems more and more varied and diversified, and to reduce dependence on the traditional mainstays of provincial finances,—land revenue, excise, stamps and in a few cases irrigation. But this effect has by no means been appreciable yet. More far-reaching changes may occur in due course, since the potential significance of many of the sources of revenue recently tapped is much greater than their actual present importance: there is likely to be increasing pressure for relief from the existing burden of land revenue reduction in the receipts from drugs and alcoholic liquors and a consequent drive for alternative sources of state revenues. One of the most interesting and fruitful fields of speculation for the student of provincial finance is to gauge the directions of this drive, its general character and intensity.

Economy Drives: Temporary and Permanent

In logical order a consideration of the possible means of economy should take precedence, for it is obviously desirable to see first that the existing resourcse at the disposal of the state are utilised to maximum effectiveness before resort is had to taxation,—fresh or additional—to finance the development of state activities. A keen search for possible avenues of economy was therefore undertaken in many provinces. The results have on the whole been none too encouraging: the provincial governments have found themselves up against the constitutional incapacity to touch the salaries of the higher ranks of services, and, in the face of this limitation, have been unwilling to lower still further the scales of salaries of the services under their control; these scales had already suffered a drastic reduction during

the depression of the early thirties. The whole field of expenditure in provinces had, indeed, been closely examined with a view to economy only a few years before. That scrutiny had been carried out under the shadow of an acute economic crisis which completely upset the budgetary equilibrium of most provinces and compelled immediate resort to stern measures to cut down expenditure. Expenditure in the provinces had since mounted up again. But the character of the new economy drive was at once more fundamental and difficult: the earlier reduction in expenditure was of an emergency character and therefore, in a sense simpler and easier; with the all-round curtailment of Government activities, the efficiency of administration probably also suffered much impairment; the task before the provincial governments now was the long-range task of planning or rationalising the provincial expenditure as a whole, of securing economies in expenditure in certain directions with a view to increased expenditure in other directions. It was the problem not of effecting a *temporary reduction in expenditure to meet a temporary drop in revenues*, but of making *permanent economies under certain heads with a view to permanent expansion under other heads*. This explains the modest results attained in the direction of economy recently in provincial expenditures.

Non-agricultural and Agricultural Sources of Revenue: Central and Provincial

One general characteristic of the division of sources of revenue between the Central Government on the one hand and the provincial governments on the other is that the provinces have control mainly over sources of income pertaining to agriculture and agricultural land, and the Central (or Federal) Government taxing powers over non-agricultural income and property. Thus, the provinces have land revenue and irrigation receipts among already existing heads of revenue, and powers of taxation over agricultural income and succession to agricultural property. The Federation will levy income-tax, and customs and will have power to levy corporation tax, taxation on 'succession to non-agricultural property' and on 'the capital value of assets, exclusive

of agricultural land, of individuals and companies,' 'taxes on the capital of companies.' Now this division has a sound basis in the economic and fiscal experience of other countries. Non-agricultural income and property (except urban real estate or house property) are mobile and shiftable from one locality to another. Therefore uniformity of rates of taxation, of the methods of assessment and collection, and of the machinery of administration are essential to the efficient operation of taxes relating to them: this only a central authority with powers of legislation and control can ensure. Agricultural property, and the sources of agricultural income, on the other hand, are immovable and give latitude for inter-provincial variations of the rates of taxation.

Succession Duties, Terminal Taxes, Taxes on Fares and Freights

At this stage a few remarks may be made about that group of items of fresh taxation, which under section 137 of the Government of India Act may be levied and collected by the Central Government but the proceeds of which shall be assigned to the provinces subject to the right of the Central (Federal) Government to levy a surcharge for its purposes, *viz.*, certain succession duties, terminal taxes on goods and passengers carried by railway, and taxes on railway fares and freights. It appears unlikely that these sources would be tapped in the near future. Early in the winter of 1938-39 Sir A. Lloyd was entrusted by the Government of India with the duty of consulting provincial governments on the question of the taxation of succession to non-agricultural property, with a view to devising a suitable scheme of taxation that might meet the many well-known objections against this tax in India. The opinion of all the eight provincial governments consulted in the matter was against the immediate imposition of such a tax, though some governments supported the general principle underlying it. An important reason that appeared to have weighed with the provincial governments was that the tax would be levied and collected centrally, the scheme of distribution was uncertain and unknown at the time, and, at any rate, the

tax would entrench upon potential taxable capacity which might otherwise be tapped by taxation levied directly by the provincial governments. The desire to preserve the financial autonomy of the units thus emerges as a significant fact to be reckoned with.

As regards terminal taxes on goods or passengers carried by railway and taxes on railway fares and freights, their imposition is bound to encroach upon railway revenues: an increase in the cost of railway travel is bound to lead to some contraction, greater or smaller, in the demand for railway travel. This is inevitable, because the demand for railway travel is not absolutely inelastic: it is more or less elastic under different conditions over different distances, for different classes of passengers. Given the central principle of railway rates and fares, *viz.*, charging 'what the traffic will bear' so as to maximise receipts, it is possible that the aggregate realizations of railways, including the receipts of the tax, may actually decline. In any case, railway revenues are certain to fall. To reduce this loss to a minimum, it would be necessary to make traffic by other means of transport subject to similar taxation.

The real position thus is this: Section 137 of the Government of India Act provides a means for diverting a part of growing railway earnings to the aid of provincial governments with their expanding needs. The Central Government is itself the recipient of an important contribution from the railways, responsible for their solvency, and in a position to ensure uniformity over the provinces in the operation of a scheme for such diversion; the Central Legislature has therefore been largely empowered to determine the extent of such diversion. Whether such taxes are imposed, and if they are imposed, the amount which may be made available for distribution among provinces, would depend very largely upon what view the Government of India take of their own financial position and the financial position of the railways.

Sales Taxation

For the rest, a broad survey of the field of fresh taxation—a brief account of the actual steps taken to exploit it

has been given above—shows that for any substantial addition to their revenues, provincial governments must depend largely on indirect taxation, in particular on one form or another of sales taxation.[2] The swift spread of sales taxation throughout the world, is perhaps the most outstanding of post-war fiscal developments. The sales tax owes its present vogue to the severe financial strain of the last Great War and the Great Depression. The present War may see it introduced in the fiscal system of some, at any rate, of the Indian provinces.[3] I have tried elsewhere to describe a structure of sales taxation having the minimum theoretical objections.[4]

It is not possible or necessary here to refer to the details of such a tax except that it would best be levied on retail sales of goods (as distinct from a wholesale sales tax or turnover tax) at a flat (not graduated) rate applicable throughout a province (and not restricted to defined areas) with a low level of exemption based on the quantity (and not class) of sales. This relates to a general sales tax applied to all commodities with some exceptions and exemptions. (A sales tax could also be levied on the sales of specified commodities, *e.g.*, tobacco, electricity, aerated waters, other articles of luxury etc., etc., instances of which have been given above). In spite of the theoretical merits of a tax on retail sales when compared to a tax on turnover, the trend of sales taxation in India appears to be in the direction of taxation of turnover rather than of retail sales, because of the considerable practical difficulty of satisfactorily defining a retail sale and differentiating it from a wholesale sale, and preventing consequent evasions of the tax.

The main merit of the sales tax is its productivity, its capacity to produce ample revenues with a very small rate on gross sales. Its main demerit is that the tax is regres-

[2] *Report of the Punjab Resources and Retrenchment Committee*, 1939, pp. 241-42.

[3] It is reported that a Sales Tax Bill has been prepared in Bengal as well as the Punjab.

[4] *Indian Political Science Quarterly*,

sive: it imposes a heavier burden on the poor than on the comparatively rich; it is a tax on goods of general consumption, and a higher proportion of smaller than of larger incomes is spent on consumable goods.

This objection, however applies to any system of indirect taxation, but indirect taxation continues to spread under pressure of practical necessity and for lack of suitable alternative means of revenue.

Moreover, public expenditure is being directed in an increasing measure to the satisfaction of the basic needs of backward sections of the community in respect of sanitary living, health, medical care and education. It is a factor of growing importance in reducing the inequalities of economic opportunity and taxable capacities of different sections of the population. These circumstances furnish a justification for indirect taxation which it would otherwise lack.

II

Increased Expenditure vs. *Remission of Taxation*

This brings us to a consideration of another major problem before provincial governments with an important financial bearing: given the need to afford relief to the poorer sections of the community through an adjustment of the system of public finance, which of the two alternative methods may be preferred, that of extending the benefits of public expenditure in a larger measure to such classes of the community, or of reducing the burden of taxation on them? The Punjab Land Revenue Committee appointed to work out the lines of relief from the existing burden of land revenue for the small holder were faced with the dilemma of a large drop in revenues as a result of any worthwhile scheme of remission of taxation, while they felt that lasting relief to him could only come from enlarged public expenditure for the betterment of his conditions.

There are certain crucial considerations which have a bearing on the question of total remission of taxation on people with low incomes. A study of the population problem in India—"in some respects the gravest of India's

problems"[5] leads one to the conviction that any sudden accretion to income of economically and soially backward people such as the Indian labourer and peasant is likely to lead to a multiplication of numbers that would swallow up the transitory gain. This predicament is no mere figment of imagination: it is a real danger.

The commonly agreed objective of policy is to raise the standard of life of the mass of the population. But the realisation of the objective is not so simple as it might appear. It is not a question of making a mere addition to income directly through a reduction of taxation The standard of life cannot rise by a leap. As applied to a class of people, the standard of life means the manner of life to which they have become accustomed, involving a certain more or less settled rate of consumption of necessaries, conventional necessaries, comforts, and luxuries per head. It is raised mainly by education, by a broadening of the mental outlook, by travel, gradually by *an adjustment of the whole scheme and manner of life.* The upliftment of the standard of living is an uphill task, which necessitates a vigorous and widespread campaign of education and social improvement.

An alternative—and much the better alternative—therefore, to the remission of taxation for relieving the burden of the peasantry is the pursuit of a forward policy in public expenditure. Indeed, capacity to bear taxation is vitally bound up with enjoyment of the fruits of taxation. If public resources were directed in a much larger measure than at present towards meeting the positive needs of the rural population, and placing them on a firmer basis to acquire the necessaries, as well as some of the amenities of life, their burdens would become lighter. As a competent foreign observer of Indian conditions put it in his evidence before the Indian Taxation Enquiry Committee: "the true policy is to go ahead with the economical and educational development, and particularly the improvement of agriculture thus making the small holders able to pay the present revenue much more easily than they can now."[6]

[5] Bowley and Robertson: *An Economic Survey of India.*

[6] Written memorandum of Professor H. S. Jevons. *The Indian Taxation Enquiry Committee*, Vol. VI, page 89.

The objections against complete exemption of the small holder from land revenue, however, do not apply equally to some abatement of that burden. And doubtless some relief to the poor farmer is necessary and urgently called for.

Rural and Urban Taxation

Another form in which the question of readjustment of systems of provincial finance presents itself is the equalisation of the burden of taxation over the rural and urban portions of the population. It is not possible to examine with any precision the relative incidence of rural and urban taxation. A few general observations may perhaps provide a helpful approach to the problem.

It is necessary, in the first place, to note that the provincial government is not a separate and independent political entity. It does not constitute a 'state'. *Its* financial operations *alone* do not make up a system of public finance. It is a regional political authority, with specifically assigned, and definitely allocated functions, sources of revenue, and powers of taxation. Any judgment on the equity of distribution of the burden of taxation should, therefore, take account both of central and provincial taxation. On the other hand, however, local taxation by Municipalities and District Boards may not be taken into account: the distribution of the burden of local taxation accords so much more closely to the distribution of its benefits, to the provision of services in return for it, that it is best to leave it alone in a study of relative incidence of taxation.

Again, should it be possible to ascertain the relative incidence of taxation in rural and urban areas, no conclusions as to the measure of equity of the tax system may be deduced directly therefrom. For relative income will still be an unknown quantity. It is an undeniable fact that the average level of income is far higher in the urban than in rural areas. Should it appear that the incidence of taxation in towns is higher than in villages in proportion to the higher income, it may still not follow that the distribution of the burden of taxation is equitable. For, taxable capacity increases more than in proportion to the increase of income,

and equity is secured by a progressive and not proportionate tax system.

For another thing, however, it might be as well to observe that an investigation into the relative incidence of taxation in urban and rural areas is of small value as a guide to the scientific adjustment of tax burdens. The principle of fair distribution of taxation is that it should be adjusted to the capacity to pay of the tax-payer, as judged by the income. That is to say, the only category relevant to a consideration of tax burdens is the income grade. But urban and rural populations do not make up homogeneous groups falling into uniform income grades, distinct from one another.

If does appear, however, on a general view, that more important taxable resources exist among certain sections of the urban community than among the rural population; indeed, relief by reduction of taxation and extension of state beneficent activities appear imperative for the poor classes in the country side.

All the same, it is well to appreciate the vital interdependence of the town and country-side. The interests of the town and country are complementary. A prosperous country-side is reflected in flourishing towns, and the fruits of trade and industry in towns under a healthy economic system permeate to the rural areas, and bring strength to the farming population. The town enlightens the country, the country invigorates the town. Town *versus* Country side is not a good debating theme.

Wise Spending

The above very inadequate survey of a few trends and problems of provincial finance has been concerned mostly with one side of the subject under discussion, *viz.*, the revenue or taxation side. The expenditure side is no less, perhaps more, important. The prosperity of provincial finances is vitally bound up with wise spending of the proceeds of taxation. Wasteful expenditure is as likely to dry up the stream of revenues as careful spending, to expand it. Indeed, the term 'taxable capacity' has no meaning by *itself*. Capacity to bear taxation is conditioned by the manner in

which the proceeds of taxation are spent: it may be large for the purpose of financing well-designed projects for promoting public health and improving sanitation and extremely small for needlessly multiplying the civil and administrative services. Any substantial increase of tax revenues can be regarded as sound and practicable only on the basic assumption that the resulting public expenditure will contribute materially to general welfare by raising the standard of living and of life of the masses of the population. A small addition to the burden of taxation may prove onerous and extremely irksome if it brings no compensating benefit: a comparatively large addition may be lightly borne if it brings an abundant return in increased public welfare.

War and Provincial Finances

In conclusion, a word may be said about War and provincial finances. War is a factor of such immense and wide importance in all spheres of individual and national life that it should be surprising if it did not affect the state of provincial finances. (It is unfortunate, in this respect that the detailed and graphic picture of provincial finances furnished formerly by the budgets and budget speeches of provincial Ministers of Finance are not available this year.) Yet surprising as it may be, it would appear to be a fact that War has yet had no considerable effect on the main structure of finances of most of the Indian provinces. This statement may sound patently incorrect to those who come from the eastern Provinces of Bengal and Bihar, the finances of which have suffered grievously from the drop in exports of jute. Nevertheless, it is a fact that provincial finances —inelastic and exiguous as they are—are less susceptible to external disturbances than the finances of the Central Government. All the same, War entails much additional expenditure for the maintenance of the internal peace and for preparations for civic defence, and as it grows intenser and draws nearer is bound to impose the severest strain on the resources of the Provinces, as already of the Centre,

VALUE AND SOCIALISM

BY

GYAN CHAND.

The challenging criticism by Mises, Hyek, Robbins and others of socialist economy on the score of the latter being unable to provide any basis for rational economic calculation has given rise to a debate which has served a useful purpose. It has made it necessary for economists to state the issues clearly and indicate the alternative methods of the allocation of economic resources in the new social order with greater precision and understanding. Though the criticism has been primarily directed against socialism, the critics have made it clear that it can be urged with equal force against all controlled and directed economic systems; and in so far as it is valid, it is an argument against central direction of economic resources in all forms and shapes, against planning of all varieties. It has, therefore, to be realised that the point at issue in the debate is not merely that socialism must in the nature of things be irrational and therefore extremely wasteful in the use of inevitably limited economic resources, but also that all considerable deviations, both of Right and Left, from competitive economy must put price mechanism out of action, the operation of which is the only impersonal objective, and, therefore, rational method of measuring relative cost and utility of the alternative productive processes and of attaining a position of equilibrium, *i.e.*, that of maximum aggregate satisfaction both from the individual and social standpoints. In every economic system, it is maintained, there must be heirarchy of wants and therefore scale of economic values for determining the distribution of productive resources; and in all economic systems except the competitive system based upon private property and private enterprise, this scale of values cannot but be arbitrary and authoritarian

and involve negation of liberty, misapplication of human and material resources and ultimately chaos in economic life, owing to unresolvable conflicts of wills and purposes. According to this view, in the words of Prof. Ludwig on Mises, 'capitalism is the only conceivable form of social economy which is appropriate to the fulfilment of the demands which society makes of any economic organization.'*

The above argument is a plea for the restoration of Laissez faire, of completely free and unfettered competitive regime. Its underlying assumption, of course, is that even imperfect competition gives a better approximation to the 'ideal' allocation of economic resources than any alternative economy that can be substituted for it. The issue, it need not be stated, is of vital importance from the practical standpoint for regimentation of economic life rendered necessary in all belligerent and so many neutral countries by the exigencies of the war is likely to make it almost impossible to unscramble the eggs that are being scrambled by the march of events and make the pre-war trends of economic forces an irresistable factor in the post-war reconstruction. That is so indisputably obvious that if atomistic economic system is to be taken as the only rational economic system, our retreat from reason, which has been going on for nearly two decades and has been greatly accelerated by the war, will become an organized rout after it even if it ends with the triumph of freedom and justice whatever the phrase may mean. On this assumption the outlook, taking the most optimistic view of the future, is from the economic standpoint very bleak indeed; and whatever the post-war order may be, it will be an order doomed to frustration and entail extreme degradation of human life.

Owing to the comprehensive character of this criticism the problem of valuation can be treated as a general problem of regulated economy without any direct reference to the socialistic approach. But in this paper it is proposed to discuss it as a problem of socialism firstly because it is in that context that it has been set for discussion at this session and secondly because the delimitation of the problem will

* Mises. Socialism P. 220.

make it more easy to deal with the points at issue. The problem is, it is evident fundamental and raises many and wide issues. It is not possible to deal with all of them even briefly or any one of them at length in this paper. All that can be attempted is a statement of some of the more cardinal points and of the relevant considerations bearing on them. The first among these is the standard of rationality which has been made the crux of the whole question. What is a rational economic system? Why must a socialistic system with its central direction and control of economic life be irrational? A rational system, according to the view which we are discussing, must be impersonal and its prime mover should be not the will of the person or persons in power but indices of readjustments provided by movements of free and unregulated prices. This point is dealt with a little later, but here it is necessary to state that this is a very limited conception of the rationality of a system. An economic system does not and cannot function in vacuum. It always is and must be an integral part of the entire social system. Whether a system is rational or not does not merely depend upon its internal mechanism of re-adjustment, but its ability to achieve and realise its social purpose. An economic organisation, being essentially a net work of human relations, cannot be said to function rationally unless it can subserve and promote a purpose which though immanent in it must also transcend it. If it creates internal strains and stresses and is in conflict with the general social purpose or twists it out of shape by thwarting it continuously, it cannot be considered rational howsoever automatic or foolproof its internal mechanism. The competitive economy may be a marvel of self-adjustment or self-regulation, but it has to be superseded owing to the tormenting internal and external discords which it has created, and also owing to the fact of its haviug made co-existence of abundance and want the outstanding feature of the present economic life. A system which can provide conditions of full employment only when rearmament is undertaken on an extensive scale or a total war of the kind, which is now on, is raging, is not a system but an insanity fair, the stark irrationality of which is clearly indicated by its actual behaviour. Rationality or otherwise

of an economic system has, therefore, to be judged by criteria which cannot be given by the system itself and have to be provided by norms of social life.

That, of course, means that rationality is primarily a question of ends and not means; and as ends are put out of bounds for students of Economics by Messrs, Hayek, Robbins and Co., the point stated in the preceding paragraphs is, from their view-point, irrelevant. It is not possible to say more about it except that the practice of these and all other economists of note is not in accord with their premise and they have freely arrogated to themselves the right to sit in judgment on social ends even when they have clearly posited their academic indifference to them. At no time is it possible for a social scientist to pursue his studies in an academic ivory tower; but at a time of social upheavals, like the one through which we are passing, indifference to the ends is manifestly an escapist device and not a means for the delimitation of scientific spheres. We economists *qua* economists cannot be indifferent to the issues at stake today and have, therefore, to include the choice both of means and ends within the ambit of our interest and studies.

In other words the problem of values or the assessment of the relative importance of different goods and services cannot be divorced from the scale of values which a system accepts or is based upon; and though in static times the values can be taken for granted in the discussion of the problem of valuation, in the twilight of the radical change, which is now in progress, they, *i.e.*, the values, become both the motive and measure of reorganization, *i.e.*, the standard with reference to which its results can be appraised. If this view is correct, rationality of a socialist economic system depends upon whether socialism is in itself, to use Hobhouse's phrase, the rational good and further whether it is realised in and through the workings of its economic system.

The argument of the critics of socialism, however, is that granting that socialism is a value of higher order, this value cannot give us a scale of preferences or priorities independent of the will of central authority according to which commodities may be produced and economic resources allocated; and without such a scale the problem of values under

socialism must remain insoluble. It is the old argument of the unworkability of socialism in a different form. It is held to be unworkable not because human nature cannot rise to the lofty heights of altruistic behaviour necessary for putting socialism into practice but because human mind cannot deal with the problem of social accounting and economic administration which socialism creates. Authoritarian socialism may work through fiats and coercive action but socialism cannot be combined, thus runs the argument, with what has been consumers' sovereignty and free choice of occupations. All this argument about the impossibility of economic calculus under socialism amounts to a restatement, in academic idiom, of the familiar view that a socialist state must be a servile state.

This argument can be easily countered by pointing out that at present consumers' sovereignty is for a vast majority of people, who are living on subsistence or sub-subsistence level, a meaningless term and freedom in the choice of occupations instead of being right of all is a privilege of the few, who use it to the detriment of the interests of the many and the community. But apart from these well-worn counter-points, why should it be impossible under socialism to grant freedom in the choice of goods and occupations? Freedom in the choice of goods may, and in the transition period must, be limited when there is shortage of even essential goods in order to provide and maintain national minimum for all. That, of course, means rationing which is as justifiable in an economic emergency created by conscious change over from a state of chronic and in many cases organized scarcity to that of relative abundance as in an emergency created by war. But once the transition has been made why can 'parametric function of prices' not be restored, why can they not be used as indices of 'the terms on which the alternatives are offered,' alternatives both of goods and work?

Before the point is further considered it is necessary to state that the state of relative abundance referred to above, the state in which there will be surplus after the necessaries of health, efficiency and culture have been provided for all—in the world as a whole and particularly in the country like India—is itself an ideal which, though attainable, will take

time and require tremendous effort. In the duration of the effort the national minimum for all will itself provide measure of the total needs of the community, needs of the individual consumer and also indices of relative scarcity. 'Bread for all before cake for any' being the guiding principle of this period, the limits within which variety of tastes can be permitted to be an operative factor in the determination of the nature and direction of productive effort will be clearly indicated by this maxim. Even during this period the mind will have to be catered for, the talented and exceptional persons given scope and therefore uncommon opportunities for their ability and functional differences to get over the 'incentive' difficulty permitted. Economic emergency, therefore, need not and would not mean a dead level of uniformity in income and consumption and the scale of values will necessarily take into account and provide for the need for avoidance of undue rigidity. But the problem of valuation during this period should be capable of a comparatively easy solution, and if each worker gets at least money income, which supplemented by real income provided by social services, will assure him his civic minimum and productivity of goods is increased to and maintained at a level adequate for providing this minimum, production will become more a technical than an economic problem, and the balancing of cost and utility, the attaining of equilibrium position, need present no serious difficulty. This period, it may be repeated, will be long in almost all cases and the economic calculus will be set by the supreme need for raising the life of the community as a whole to a level which can be taken as a real beginning of the end of, to use the well known phrase of Engles, 'the realm of necessity,' of the despotism of material want.

The transition period will be long enough to experiment with and evolve new technique of continuous economic readjustment suited for the new social framework. But as price mechanism can and should function in this set-up also, the technique need not strain the apparatus of economic administration to the breaking point. This is, however, just the point which is denied by theorists whose views are being examined in this paper and has to be further considered.

Their contention is that free price mechanism can serve as a true index of relative scarcity and therefore of rational allocation of economic resources when there is private property, private enterprise and completely decentralized economic initiative, in one word perfect competition. It is now admitted that by conceding a large measure of freedom to the consumers in the choice of goods and to the producers in that of occupation, the relative intensity of demand and the relative disutility of work or real cost can be measured even when there is central direction of industry; and the regulating authority can adjust production and wages according to the indices provided by the price system under a socialist system. The indices will be more reliable in as much as elimination of what may be called non-functional inequalities will enable the price system to function as an instrument of the new social purpose and not as a means of perpetuating socially unjustified and unjustifiable privileges. Price structure, it has to be realized, is not an impersonal mechanism without any relation to the social structure for which it works or which works through it. In it are embedded inequities of origin and function of the existing economic system; and if an economic system is brought into operation which does not suffer from those inequities, price structure will naturally reflect the underlying principles of the new system, and both in consumption and production express and realise real human needs and abilities and not social snobbery in different shapes and forms. Prices without the perversions due to the co-existence of extremes of wealth and want and to the grossly unfair disadvantages caused by the inequalities of opportunities can and will become the true measure of utility and cost—an effective means of balancing benefits and strains of the different productive processes from a truly human standpoint.

Valuation of consumers' goods and services does not, however, according to the argument, solve the problem of value in a socialist state for the real problem relates to the allocation of intermediate goods which cannot be evaluated if free market and the private ownership of the instruments of production are absent. The problem, in other words, is the problem of imputation and not of valuation and the

producers' goods cannot have value imputed to them when there is no private property in these goods and therefore no right of free disposal, which, when exercised, determines the terms on which these goods are offered for alternative uses. This assumption involves two others, one that the total capital, *i.e.*, the surplus allocated for productive purposes, is determined by marginal productivity of capital as a whole and the other that the amount of capital allocated to each use, its distribution among different industries, depends upon its marginal productivity in each industry. Within the space of this short paper it is not possible to discuss these points fully. But the discussion of these points that has taken place, has led to the conclusion that new investment under socialism being the result of decision of the supreme economic authority must be arbitrary in the sense that the authority has to decide the amount upon general consideration of policy and cannot balance marginal rates of discount and marginal return from investment. In this respect provision for investment under socialism will be no more arbitrary than it is under the existing conditions for the trend of recent theory and practice has practically gone against the view which assigns to the marginal saver a decisive role in determining the amount of capital available for investment. Time preference on which this view is based, is a fact, but private and institutional savings, the relative importance of which has, as is well known, greatly increased recently, are very largely independent of the rate of interest and marginal productivity of capital as a whole. Under socialism the supreme economic authority must assume the responsibility for deciding how much national income shall be devoted to improving and adding to the productive equipment of the community and its decision must be rational in the sense of being based upon a careful analysis of the relevant data, but has to be more a matter of rational judgment than of rational calculation. The decision can and should be a nearer approximation to the equilibrium position than what is attained at present for investment today has little or no relation to social utility and cost, and from the standpoint of social accounting is extremely haphazard and has no real validity.

The argument is, however, pushed a stage futher and it is urged that in absence of markets for factors of production their allocation and combination in different proportions must lose all economic significance and be governed either by purely technical consideration or by the fiats of the central economic authority. Here, two considerations are involved. One is the value of factors of production and the other the rate of interest for the cost of capital goods depends both upon their value and the period of production or the time which they take to 'ripen' into consumption goods. For land and labour, at least for accounting purposes, qualitative differences will have to be allowed for by assigning to them a scale of differential charges and taken into account in calculating the cost of production. The value of capital goods will not present any special difficulties of its own and can be reckoned on the same basis as the value of other goods but it will be necessary to debit for accounting purposes to the producing concern a charge corresponding to the rate of interest in order to make allowance for time factor in production. The rate will have to be conventional to start with and varied later; but its function will be to bring investment into direct relations with the price of finished goods, *i.e.* throw upon the manager the responsibility for meeting the charge for capital asked for by and provided to him out of the price of his commodity. It will take time to bring this adjusting mechanism into smooth and efficient working order and necessitate the adoption of a tentative approach to the whole problem. But in the nature of things, there is no reason why the allocation and combination of the factors of production under socialism should in due course not be normalized under the new millieu of economic and social conditions.

Development of this method of adjustment can and should keep pace with changes in supply and demand. It has been urged that by stereotyping per-socialist combination of factors or making minor modifications in it, it may be possible to take over the present system as a going concern or keep it going; but if the system is to be progressive and dynamic, central price fixing as a method of adjustment is bound to break down under the strain of changing conditions

and cause boundless confusion in production and consumption. Socialism cannot possibly stereotype any conditions, much less pre-socialist conditions without ceasing to be socialism. But the dynamic function of the price system should have freer scope under socialism owing to its freedom from inhibitions of the present system. Central price-fixing need and should not mean centralized price-fixing. Variations in prices due to uncontrolled oscillations of competitive forces will, of course, be eliminated in a socialist economy and changes that require adjustment will neither be convulsive nor arise from economic offensives of a different kind. But bona-fide changes—changes due to variations in demand or supply—should in most cases be anticipated by the central authority; and when unanticipated changes occur, it should be possible to apply the brake on or to accelerate the working of the system or to modify its course according to the needs of the situation, the more easily or efficiently for the fact of the system being under central direction and control.

The fundamental fact of valuation under socialism should be that divergence between private and social costs should disappear and labour cease to be merely a vendible commodity. If guarantee of a social minimum to all becomes a primary objective of economic policy and differences of income become purely functional, *i.e.*, are accounted for by the need of getting more and better work done, the whole basis of valuation under socialism will be changed. Development of social services and social education will reduce the relative importance of these differences; but even if they exist and are varied to regulate the distribution of labour in different occupations, price structure will represent an entirely different social structure—a different conception of human labour and human life. Price structure will not be the only medium of economic re-adjustment under socialism. It will have to be supplemented by a new technique of social re-adjustment, but in so far as the price system is used for the purpose, its whole significance and bearing will be different owing to the economic system having an entirely new basis and new purpose.

Limits of space have made it necessary to compress

unduly the argument of this paper. That is a disadvantage as it is likely to give rise to misunderstandings, against which trained judgment of the professional economists before whom this paper is being read is the only safeguard. In the argument no reference has been made to Soviet Russia and its experience and the omission is deliberate. The available information about the working of the Soviet system is conflicting, and it is not possible to cite, in support or against the various points, Russian evidence whose authenticity can be accepted without question. Soviet Russia has, moreover, passed and is passing through a period of strain and stress owing to its internal conditions and external circumstances, which has limited its course of development and forced upon it criss-cross compromises the inwardness of which can only be fully understood by the dialectic gnostics. But in spite of these qualifications it has to be stated that the experience of Russia, though not conclusive in favour of rational allocation of economic resources under socialism, does not indicate the impracticability of rational adjustment of scarce means to ends in a socialist economy. Whatever may be the failings of Soviet Russia, the allround striking progress achieved by it makes such a proposition obviously untenable.

The experience of Soviet Russia, does, however, raise another point which cannot be discussed in this paper but is of fundamental importance. Soviet Russia has been and is a totalitarian state. That may be, as is contended by the supporters of the Soviet regime, a transitional stage towards a non-authoritarian society in which 'the government over persons will be transformed into administration of things.' But Russia has not proceeded far in that direction. That may be more her misfortune than her fault, but the fact has an important bearing on the subject under discussion. Socialism has to be a unitarian but need and should not be an authoritarian economy. Central control, if it means centralized power, has not only its political dangers but is bound to make the economic system rigid and unadaptable. In other words economic dictatorship is incompatible with flexible, creative and progressive economic system: and, of course, economic dictatorship makes political dictatorship its

logical corollary and far more dangerous than otherwise it would or could be.

Under socialism there will be fusion of economics and politics and therefore the problem of power more than the problem of value will become its fundamental problem. Soviet Russia has not been able to solve the problem yet and the war, even if it ends with the defeat of the Axis powers, will make it *the* problem of the post-war world. Power has to be tamed and cannot be tamed by the restoration of Laissez-faire in politics and economics. New political and economic apparatus has to be constructed and put into action with a view to combine freedom with co-operation on an international scale. The task is stupendous but there is no escape from it, and if the world can accomplish it, the solution of the problem of value under socialism will present no insuperable difficulties. The problem is an age-old problem of achieving unity without uniformity in the bewildering context of the world of today, and unless it is solved, defeat of the Axis powers will not save it from progressive descent into frustration and anarchy. Socialism will, therefore, even from the economic standpoint have to develop its system of checks and balances and make it possible for the general will of the community to express itself through a process of continuous economic re-adjustment and attain a position of dynamic equilibrium.

In this paper no reference has been made to literature on the subject as within the limited scope available it was not possible to deal with the specific points raised by the various writers. But for convenience of reference the more important books and periodical articles on the problem of valuation under socialism are listed below.

Title of the book or article	Author	
Socialism ...	Ludwig Von Mises	Part II Section 1 Chapters I and II
Collective Economic Planning	F.A.V. Hayek and others	
Economic Planning and International Order.	Robbins	PP. 194—220.
Economic System of a Socialist State.	R. L. Hall	...
Economics of Socialism ..	H. D. Dickinson	...
Economic Theory of Socialism.	Oscar Lange & F. M. Taylor.	...
The Theory and Practice of Socialism.	John Stratchy	PP. 40—53.
Socialism versus Capitalism	A. C. Pigou	Chapters 3 & 7.
Political Economy and Capitalism.	M. Dobb	Chapter VIII
Price Formation of a Socialist Economy.	H. D. Dickinson	Economic Journal June, 1933.
Problems of a Socialist Economy.	M. Dobb	Economic Journal December, 1933.
Economic Theory and Socialist Economy.	A. P. Lerner	Review of Economic Studies Oct. 1934.
Economic Theory and Socialist Economy—A Reply.	M. Dobb	,, Feb. 1935.
Economic Calculus in a Planned Economy.	E. F. M. Durbin	Economic Journal Dec. 1936.
Statics and Dynamics in Socialist Economics.	A. P. Lerner	Econimic Journal June, 1937.
Economists and The Economics of Socialism.	M. Dobb	Modern Quarterly April, 1939.
The Socialist Calculation...	F. A. V. Hayek	Economica May, 1940
Freedom and the Economic System	F. A. V. Hayek	The Public Policy Pamphlet No. 29 Chicago University.

VALUE IN THE SOCIALIST STATE

BY

S. K. Rudra.

The problem of value is inescapable. Whatever the stage of economic development, and whatever the type of social structure, it is always present. Neither the individual, nor the group, can be rid of it. Not even the anchorite can run away from it. For he too has appetites, though reduced to the minimum. On the other hand, for men in modern communities, the question is of supreme importance. Indeed, it dominates the greater part if not the whole, of the best years of their active life.

In the emergence of value, much change has taken place in the course of human history. It has been the index of man's upward rise from the primitive to the present. We need, however, to concentrate on some recent phases only. Since a hundred years or so, the method of determination of value has been the process of bargaining. The classical tradition has required that this process should operate, without let or hindrance, either on the side of supply or that of demand. It has visualised pairs of individuals engaged upon this task. Thus, individually, and ultimately, for a given region, a value is settled. This equates the supply and demand of commodities or services in question. In areas of monetary regime, such valuation is recorded in terms of price. Thus it used to be.

But gradually, with growing complexity of the economic order of society, and an ever-expanding tendency towards specialization, and group formation, the classical pattern of the fixation of price, underwent change. Instead of the individual, it is now the group that determines value. Indeed, the individual has little say. Such latitude as he has, is over minor commodities and services. In the highly industrialised and advanced communities of the world, these

exercise but little influence. The course of investments, and of economic operations work independently of their behest. Their power is limited. The fact is that it is Cartels, Monopolies, Trusts and Syndicates on the one hand, and Trade Unions, Co-operatives, and consuming establishments on the other, that determine value. Such is now the operation of the pricing mechanism. In still more recent years, and particularly now, it is the State that plays the major role. Whether in the money market, or whether in the matter of Foreign Exchanges, or whether in respect to world-staples in raw materials, food-stuffs and mineral output, or whether in the matter of constructional equipment and machinery, or whether in the labour market, or whether in respect to transportation services in particular, it is the voice of the State that finally fixes the prices. This is done either directly, as in these days of war, or indirectly during peace time. In any case, we shall have to admit that conditions as envisaged by the classical School of Economists, have changed profoundly.

Therefore, if the Socialist State takes a hand in the price fixation, it should not be regarded as something pernicious or unnatural. The technique of production, the financial organisation, and the marketing mechanism have so developed, that grave consequences would have ensued, as indeed they did, if the states did not step in to regulate conditions. This control has been exercised by every State, irrespective of the fact whether it was based upon the liberal or the monarchic principle of sovereignty. The Socialist State does likewise. Only it does it with greater completeness, and possibly, with greater success.

But essentially, it is not so much the method or the manner in which this process of price determination is conducted, that is of immediate concern to us. That is only the mechanics of the problem. We are interested far more in the foundations on which is built up the price mechanism of the Socialist State. For in such a State the old and familiar basis of private property, the conduct of industry for personal gain, the freedom of investment, and the liberty of the selection of occupation, and the choice of sale and purchase of goods and services is limited, if not largely

swept away. The old structure, with its traditional sanctions, is destroyed, as in Russia. Instead, other values are introduced.

The first matter to recognise in the Socialist Scheme of things is, that value is not judged in terms of units of gold. For the sake of convenience only, gold, or the monetary media is continued with. It is employed as a medium of account-keeping. It provides a familiar system. Hence, such naive devices as labour-time tickets have not prevailed. But the value of things is not determined.

Value, in the Socialist State is influenced preponderatingly, from the side of need. The side of supply does not count as much. It is essentially a consumers' economy. The producers' accumulations are less dominating. Of course, the cost aspect is not neglected. It is, however, definitely subordinated to the service principle. All dealings at home, and all transactions abroad, are regulated on the basis of need. The ideology that dominates Socialist conception is the satisfaction of the wants of men. Capitalistic economics also attempts similar achievement. But, in the motive of personal profit, it transgresses all consideration of those who have insufficient purchasing power at their command. The reason of this lack, is a matter of indifference to its philosophy. Thus, in its very endeavour to meet the needs of men, it has over-shot its mark. Hence, the tragedy of the paradox of poverty in the midst of plenty.

To my way of understanding, Socialist economy is grounded upon the thought of affording to the citizen a measure of material and cultural satisfaction. This is determined by the resources of the community and the technical efficiency of its apparatus. This to me seems to be the concept of value in the Socialist State. It is the unit of measurement. All else follows from it. The utilization of resources, the determination of schemes, the appointment of their priorities, are thus arranged. The individual, as well as the group aspect of the problem, is considered. By abundant and accurate supply of relevent data and statistics, by careful scrutiny and appraisement of competing needs and claims, by individuals concerned, and by a whole series of expert committees, groups and institutions, final adjust-

ments of means to ends are authorised by competent authority. The process may be slow or it may be rapid, that depends upon circumstances. But, in any case, it is not left to blind force. The chaos of competition, inspired by self-centered, individualistic utilitarianism, does not decide it. There is a given purpose behind it all. In the Socialist way, there is a deliberate and conscious intent within its purview. It may even decide that "Guns are better than butter" or that "Opulence" is no true measure of economic worth. The individual may be called upon to tighten his belt. But what matter. Even under capitalistic economics, thousands, and in China and India millions, need hardly to tighten their belts any further. Their abdominal cavity cannot be made to shrink any more, due to generations of under-feeding to which they have become accustomed. But, the difference in the two cases is important. In the instance of the Socialist State, the privation is endured for a given national good. While under the capitalistic system, it is undergone for the sake of the profit of the affluent few. There is an element of sacrifice in one, and a note of despair in the other.

It should not, however, be assumed that the flow of means would always be in the same channel, or be of the same volume, or be at the same rate, having once been so decided. Under bureaucratic direction this is the obvious danger. But this would not necessarily happen. With change in population, change in the technique of production, change in international obligations, or change in any other sphere, there would correspondingly follow suitable adjustment of the employment of means to ends. Indeed, with an elaborate system of statistical information, and other closely studied facts at hand, the Socialist state would be in a better position to meet economic situations than States functioning on the liberal principle of government.

Furthermore, valued from this standard, namely, of supplying the citizen with adequate means of satisfaction of physical and cultural needs, the Socialist State would be able to adjust means to ends much more appropriately from point of view of time factor, than is possible within the capitalistic framework of society. The individualistic point of view, necessarily, cannot consider remote yields with equal degree

of satisfaction as the more immediate. Undoubtedly the recent forms of business organisation that have come into being are more or less ageless. The modern Joint Stock Companies and corporations have considerably modified this aspect of the question. Nevertheless, these institutions cannot be expected to take the same view of the prospective with the present, as can the State. Long range considerations cannot be given as much weight. In the matter of nation-building activities particularly, this is obvious enough. The State, provided it is not run for Party purposes, can take measures which would wisely adjust resources as between present and future needs. Herein lies an economic asset with the Socialist State which it can utilise with exceptional advantage as contrasted with the capitalistic. In due course of time, such an arrangement of the national resources should yield rich results, both materially and culturally.

To revert once more to the concept of value. We have indicated that it represents the satisfaction of a given degree, of the average citizen. This must be reduced to a reckonable unit. It will, of course, need to be determined from time to time. For Society is dynamic. The unit of composite goods and services which we contemplate, would require to be modified, periodically. The magnitude and range of items included, would obviously depend upon various factors. As for instance upon the wealth of natural resources, and the efficiency of the economic organisation of the state concerned. On the other hand, it will also depend upon the dimensions of the population, its sex and age composition, and its rate of increase. These would materially influence the determination of this unit. But, taken one with the other, this unit could be fixed. Its worth could then be related in terms of money. This, rather than the unit of Gold, would be the criterion of value. The price level would be fixed in reference to it. Foreign exchanges would be accordingly controlled. There is no particular reason why this system should not work. It is known that vested interests, habits of thought, force of tradition and usage tie people down to known methods. There is a reluctance to embark upon new devices, specially in respect to such a vital institution as money. This is understandable.

But, from several aspects, a composite unit as suggested above, would be more truly representative of the economic health of the community than merely gold. Also such a unit would be more essential to the well-being of the people than gold.

The matter of rates of interest, and policy of depreciation, and the building up of reserves would be determined by the State. The real test of the proposed unit will lie in its relation to reward to labour. In so far as the unit would be equal to, or less than the marginal productivity of labour, in the respective occupations, no difficulty would arise. The difficulty would be occasioned, when the worth of the unit fixed, would be greater than the value of the marginal contribution made by labour. A deficit would be registered. But it would not be unwarrantable to presume that the vast majority of labourers would be yielding more in return than they receive. For in such a Socialist State it must be borne in mind that all the institutions, educational, technical and others, would be so motivated as to urge the worker to give the community of their best. Besides this, there would be the payment of wages, above this minimum, according to results. This would induce the vast majority to continue to exert to their capacity. Those whose contribution would fall below the unit, could be supported and cared for, after due examination of each case, by group-aided or State-operated institutions. Such liability would have to be carried. The capitalistic society is not free from the assumption of such burdens even now. There is therefore no serious difficulty presented by this method of remuneration to labour.

Of course, no system is entirely free from some drawback or the other. The question of the stability of the value of this unit is a matter of some importance. We have to admit that in a country on the margin of subsistance, there would be difficulty. In such countries the content of the unit proposed, would be mostly composed of food-stuffs and raw material goods. These, as we know, are subject to much fluctuation. Though it must be recognised that even in respect of these, with modern methods of cultivation, and crop arrangement, variability of the total world output can

be very much reduced. Violent fluctuations at any rate, can be avoided. Besides, with advance in material prosperity, manufactured and other goods would increase as items in the content of the composite unit. Fluctuation in respect to these are not so great. Value of the unit would therefore be more stable. In any event, the monetary mechanism would be competent enough to care for these disturbances effectively.

Such then would be the unit of value in the Socialist State.

SOCIALIST ECONOMY AND THE PROBLEM OF PRICING

BY

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I.

Price Mechanism and Economic Efficiency.

One of the governing factors of our economic life is the scarcity of resources. Consequently, in the distribution of resources among different industries, it is necessary to apply the principle of economy or the principle of maximum satisfaction. Now, it is claimed that a competitive system with its price mechanism can realize the principle to a large extent by distributing each factor in each industry up to the margin where the marginal net product is equal to the average rate of remuneration and the marginal cost is equal to the price. The result is that there are, on the one hand, optimum employment and output, and on the other, maximum aggregate satisfaction. And this happy result is brought about by perfect competition between a large number of independent producers and consumers and employers and factor-owners.

But, in practice, this price-mechanism of the competitive system can realize the principle of economy only to a limited extent. This is so for several reasons. Firstly, it is rarely, if ever, that it can establish that close correspondence between marginal private net product and marginal social net product, which is demanded by the principle of economy. Secondly, the scales of values of goods and services which determine commodity prices and factor prices are based upon inequality of wealth, and in turn, tend to perpetuate that inequality. Consequently, the satisfaction that it yields is weighed heavily in favour of the possessing classes and is, therefore, less than the optimum satisfaction

which might have been derived by the community with a more equitable distribution of wealth. And, thirdly, due to lack of co-ordination and long-range view, the competitive system is liable to great fluctuations which cause frequent spells of low employment and output and thus involve enormous wastage of resources.

II.

Economic Efficiency and the Scope of the Price-Mechanism in a Socialist Economy.

How will a socialist economy compare with a competitive system in respect of this economic efficiency? First of all, in so far as the capacity of the economic system to yield satisfaction is at least partly governed by the distribution of wealth, it is obvious that a socialist economy, by tilting the scales in favour of the poorer classes, can make a given quantity of resources yield a larger amount of aggregate satisfaction than a competitive system. It will give more food and clothing and housing accommodation to the ill-fed, ill-clad and ill-housed and less luxuries to the richer classes. Thus, by satisfying the more urgent wants at the cost of the less urgent ones, it will increase the aggregate satisfaction in the community. Secondly, although, due to lack of necessary data, neither system can accurately and objectively measure marginal social net product, yet a socialist economy with a centralised planning system will be in a better position than a competitive economy to measure it by a general, *qualitative*, feel, and to redistribute resources from time to time in such a manner that the marginal private net product and the marginal social net product may be approximately equal in every line of production. Thirdly, by taking a comprehensive and long-range view of national resources and requirements and by adopting an anti-cyclical budgetary and public works policy, a socialist economy can smooth out the course of employment and production over the whole of a given period. Moreover, in such a system risks and uncertainties, in so far as they are due to un-co-ordinated competition and short-range view, will be reduced. Therefore, it will be in a position to lower the rate of interest considerably so as to

increase the scope of investment and employment. And furthermore, since it will be in a position to control to a large extent supply and demand for capital on the one hand and supply and demand for money on the other, it will be able to regulate both marginal efficiency of capital and rate of interest, the two factors that largely govern investment, output and employment.

Thus, we see that, from certain larger, social, points of view, a socialist economy will be more efficient than a competitive economy. But, can a socialist economy function as efficiently as a competitive economy over that large remaining area in which the latter does realize something approximating to the optimum distribution of resources with the aid of the price-mechanism?

Now, in a socialist economy with central planning, there will be three sectors of productive activity: First, socialised production for community consumption; second, socialised production for individual consumption; and third, competitive production for private consumption.

The first sector will be concerned with providing free education, medical aid, public parks, picture galleries, museums, free milk for school children, etc. In this sector, the price-mechanism will be of no avail, because the marginal satisfactions derived by individuals cannot be measured. We may perhaps define these goods as *public economic* goods, because they are not objects of private exchange. But the difference between a socialist economy and a competitive economy in this respect is only one of degree and not of kind. Both types of economy produce these kinds of public economic goods, though the former does so on a much larger scale than the latter. If we judge by the practice of modern civilised states with a competitive economy, it would seem that the more advanced and progressive a state, the greater the proportion of public economic goods supplied by it to the citizens. If that is so, then it can be contended that, in so far as this sector is concerned, a socialist economy creates a greater amount of satisfaction than a competitive economy, though, of course, in the nature of the case, that satisfaction can be measured only by a general, *qualitative*, feel and not by any quantitative standard. Consequently,

how much of these goods should be produced and how much of the total resources should be devoted to their production must depend, in both types of economy, on the discretion of the sovereign authorities. It is also important to note that, again in both types of economy, the production of these goods must have the first claim on the necessary resources.

We should, therefore, consider how far the principle of economy can be applied to the second and third sectors of a socialist economy. The third sector will be a comparatively small one. And the principle of economy can be applied there exactly in the same way as in a competitive system. We are thus left with the problem of finding out how far it will be practicable to apply the principle of price economy to the second sector which will cover a large area, perhaps the largest area of all.

III.

The Problem of Pricing in a Socialist Economy.

The working organisation in this sector will be somewhat as follows: Production will be entrusted to a series of autonomous units comparable to limited liability companies. These units are affiliated to larger groups according to technological and market requirements. These larger groups, again, are affiliated to the organisation of a particular industry as a whole. Marketing may be entrusted to the producing units or to separate selling stores. And the entire complex of organisation is unified, controlled and supervised by the Supreme Economic Council.[1]

Now, the principle of economy demands two things: firstly, that each good should be produced up to the limit where the marginal cost is equal to the marginal demand price; and secondly, that every factor should be used in each industry up to the limit where the marginal net product is equal to the average rate of remuneration.

To start with, let factor prices and commodity prices be fixed at pre-plan levels. Then, with the given prices and

[1] H. D. Dickinson: Price Formation in a Socialist Community, the Economic Journal, June, 1933, pp. 238-39.

quantities of factors, each consumption goods industry will estimate its supply-schedule and demand-schedule. On the basis of the supply-schedules and demand-schedules drawn up by the consumption goods industries, the secondary and primary industries will prepare their demand-schedules and supply-schedules. Ultimately there will emerge a large number of alternative equations of demand and supply for each industry. The task of the Supreme Economic Council will be to allocate each factor among the different industries in such a manner that the value of the marginal net product of that factor in all industries is equal and also that such net product is equal to the average rate of remuneration.

If it be found that the structure of production resulting from the optimum distribution of resources as indicated above is divergent from the structure which the planning authorities had fixed up in advance on considerations of public policy, the initial factor prices may be suitably modified so as to change the demand—and supply-schedules of the industries in the desired direction. Thus, for example, if it be found that the original demand and supply-schedules as submitted by the industries on the basis of pre-existing factor prices imply a smaller volume of production goods than has been decided upon by the planning authorities on grounds of public policy, the rate of interest may be lowered and the remuneration of the necessary factors suitably modified in such a manner that the demand-schedules of capital goods industries may be on a higher scale and those of consumption goods industries may be on a lower scale.

It may be objected that such an *a priori* decision regarding the respective scales of production of capital goods and consumption goods industries and the consequent modification of interest and wage rates would strike at the very root of the principle of price economy. But the reply is that, in the first place, even in the capitalist economy as we know it, the state decides in advance on considerations of public policy as to the amount of resources that should be set aside for essential purposes of defence, unemployment relief, administration, etc., by raising the necessary taxes and thereby automatically modifying the income structure; and secondly, that the income-structure even in a capitalist society

F. 4

is ultimately based upon conventional standards of valuation, which are always being changed due to changes in supply and demand which, in turn, are partly at least governed by the educational, financial and commercial policies of the state.

To resume our analysis of the problem of pricing: Now, when the planned production has been carried out and incomes have been distributed, it may happen that the income-receivers shift their demand-schedules from the original positions, so that it is found that there has been produced much too much of some goods and much too little of other goods. If that be the case, as it is likely to be, then the accounts department of every selling store may draw up these new demand-schedules of consumers and pass these backwards to the producing unit which, in their turn, will prepare their own demand-schedules for factors and supply-schedules for commodities. On the basis of these new demand, and supply-schedules, the planning authorities may, consistently with the broad outline of their general policy, set up new scales of factor prices and work out a new scheme of optimum distribution of resources.

Thus, we find that, within the limits of a general policy, it is quite possible for the planning authorities to observe the principle of economy in the distribution of resources with the aid of a price-mechanism. And, as already stated above, it is likely that, due to long-range view and co-ordination of activities, they will be in a better position than the multitudinous producers of a capitalist system to give effect to the principle of maximum economy of resources. In this task they will be materially assisted by an elaborate system of cost accounting and statistical analysis conducted by public departments, not in the twilight of secrecy which is customary with a competitive system, but in the full glare of publicity and public criticism.

It may be said that the pricing system of a socialist economy as outlined obove is likely to suffer from two obvious defects: Firstly, that, whereas in a competitive system the desire of gain and the fear of loss generally succeed in ensuring that the entrepreneur will be kept up to the highest pitch of efficiency, there will be nothing in a socialist

economy to guarantee such efficiency because the manager of each producing unit will in any case get a fixed remuneration: His estimates may go wrong, but he will not have to pay the penalty of a heavy personal loss; the loss will be borne by the community. His estimates may come out very nearly right, but he will not get any pecuniary reward; all the benefit will be enjoyed by the community. Therefore, he need not be too careful how he draws up his demand—and supply schedules. And his carelessness may add considerably to the difficulty of planned production. This absence of a profit—loss incentive, which is one of the main springs of action in a competitive economy, may no doubt prove to be a source of weakness to a socialist economy. But this defect can be remedied to a large extent by calling into action new incentives to efficient work. The spirit of emulation, the hope of promotion to more responsible positions, and the desire for public honours on the one hand, and the fear of degradation or dismissal and the dread of public censure or dishonour on the other hand, are some of the powerful positive and negative incentives which may be stimulated and skilfully exploited with that end in view. And, in the absence of the possibility of acquiring inordinate riches or of being able to look forward to a life of idleness and extravagance, it is likely that the mechanism of the human mind will be largely reconstructed and that this mechanism will respond completely to the stimuli indicated above.

A second criticism which may be advanced against the pricing system of a socialist economy is that it will be loaded with the vast expenses of the national accounts and statistical department, which is absent in a competitive economy. It cannot be denied that this criticism has some force. But, it would be just reasonable as well to think that this special item of cost in a socialist economy will be more than compensated in that the department in question will quickly detect errors and miscalculations, expose slackness and incompetence, and greatly assist the planning authorities to establish interspacial and intertemporal equilibria between the different sections of the plan. Might it not also perhaps be retorted that, in the absence of such an apparatus of

national cost accounting and statistical analysis, it is altogether impossible for a competitive economy to measure net aggregate gain or loss resulting from the totality of the productive process?

SUMMARY.

[The object of the price-mechanism in a competitive economy is the attainment of maximum satisfaction through the optimum distribition of resources. But, due to certain inherent defects of such an economy, the objective can only be imperfectly realized. In a socialist economy, there will be three sectors, namely, socialised production for community consumption, socialised production for individual consumption, and competitive production for private consumption. Obviously, the first sector will not lend itself to the operation of the price-mechanism, becaust here marginal utility and marginal cost of production cannot be found out; in this sector, therefore, the guiding principle will be based on a general, *qualitative,* feel or wise exercise of discretion on the part of the planners. The third sector will be amenable to the price-mechanism exactly in the same way as a competitive economy. The main problem, therefore, is to examine how far the price-mechanism of a competitive economy can be applied to the large and important second sector, *viz.*, socialised production for private exchange and individual consumption. A working model is suggested and it is shown how the pricing process in such a socialist economy can operate and solve some of the fundamental problems precisely in the same manner as in a competitive economy. Certain characteristic differences between the two are discussed and the inference is drawn that these differences are likely to result in a comparative advantage for the pricing system of a socialist economy.]

PROBLEM OF VALUE IN A SOCIALIST STATE

BY

S. M. SHAFI.

Capitalism has fallen on evil days. There is hardly a person, at present, who would support fullfledged capitalism. Nevertheless, during and after the so-called Industrial Revolution, capitalism gave a good account of itself. The remarkable growth of industry and commerce and the inordinate increase of wealth were, no doubt, the outcome of capitalism. The superstructure of the 19th century economic development was built up on the foundations of private property, competition, price mechanism and freedom of the individual. Yet these very factors proved to be the causes of its decay. Wealth was increasing, but it was accumulating in fewer hands. The inequalities of income were becoming more and more pronounced. Competition was giving place to monopoly. A leisure class had come into being which was thriving on the toils of others. The excesses of capitalism—repugnant to the spirit of the age—received the just condemnation of all thoughtful persons. A good indictment of capitalism can be found in R. H. Tawney's Acquisitive Society. The revolt against capitalism gave rise to socialism and its more advanced form communism, both of which aimed at regenerating society by a more equal distribution of property and especially by substituting the principle of association for that of competition. The spectre of poverty in the midst of plenty was to go for ever. The aims of the new order were to be achieved by nationalization of all the means of production which were, henceforward, to belong to the community as a whole and not to individuals. There was also to be a central control of the entire economic life of the community. Whereas under socialism the individual was to retain freedom of choice in consumption and occupation, he could have neither under communism. The economic life of the people was to

be controlled by the state. All industries were to be run under public management. The gains from industry were no longer to go to the individuals but were to be enjoyed by the entire community. There was to be no rent, interest or profits and income was to accrue only in the form of wages. Every one would be required to work and there would be no leisure class living in idle plenty. The socialists claim many advantages of this system. According to them there would be no economic problems in the socialist world. Some socialists claim that the social plan of production will be settled very simply, without the intervention of the famous 'value.' Others claim that socialism would dispense entirely with calculation in terms of value. We may leave aside the relative merits of socialism and capitalism and may pass over the question whether in a material sense society would be better off, under one system or the other, but we must face the question whether socialist state would have any economic problems, more specially the problem of value. The question in fact assumes two aspects, firstly, whether the socialist state would have any problem of value or not and secondly, if it does have its problem of value what would be the nature and significance of the problem with regard to calculation or measurement of value. The answer to the first question is simple. The socialist state is bound to have its problem of value for without it one can hardly conceive of any workable economic system. Take the case of production. Under capitalism the trend of demand decides the prices and it stimulates those forms of production which are growing in world demand. How is production to be organized under socialism? What sort of commodities are to be produced? How are the available means of production to be utilized? As soon as different purposes compete for available resources the socialist state is face to face with the problem of value. The distribution of available resources between different uses is no less a problem for society than for the individual. If the socialist community wanted to act rationally its calculations would have to be guided by the same formal laws which apply to a capitalist society. We can see, therefore, that whatever form of productive organization the society may adopt, there

is no escape from the problem of value. Without economic calculations there can be no economy. If we turn from production to distribution of wealth we are up against the same problem of value. Although wages would be the only form of income in a socialist state yet the problem of their determination is there. This is clearly a value problem. The question of value is as much a problem for the socialist state as for a capitalist one. Without the guidance provided by value, economic activity becomes meaningless and instead of an economic order we are likely to get economic chaos.

We may now consider the other problem, that is to say, the problem of measurement or calculation of value in a socialist state. Under capitalism value is determined by interaction of demand and supply in a free market. Under socialism the problem is to determine value by some process other than competition based on private property. How should this be done in the absence of a pricing system? According to socialists value shall be determined by a process of calculation carried out by the planning authority. How will this authority proceed? Will it rely upon the old labour theory of value? The simple method would be to calculate value on the basis of the hours of labour spent on the production of a commodity. Such an arrangement cannot be free from objection. In the first place, it leaves the employment of material factors of production out of account. Value of things does not depend upon the amount of labour they have cost, but on a number of causes, among which the amount of labour plays a part, but not the only part. Secondly, what about differences in the quality of labour? As Mises says, " he who expects a rational economic system from socialism will be forced to re-examine his views." Let us now consider the determination of wages. In Russia an attempt is made to relate wages to the amount of output through an elaborate system of piece-work rates. There is also a grading of workers by different rates of wages. In most cases, however, there is a deliberate fixing of wages according to the social value of work as set up by the state. This may or may not be an ideal to follow, but in this arrangement the remuneration of labour cannot but proceed upon an arbitrary basis.

PRICE TRENDS DURING THE LAST DECADE AND THEIR EFFECTS ON INDIAN ECONOMY

BY

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Introductory

It appears evident that even without a common international standard of value, and in face of greater restrictions on the circulation of capital and on the interchange of commodities than had previously been known, the price systems of the various countries remain closely linked. Even though the units of measurement were different and world markets were broken, the general drift of prices has been the same practically everywhere. Such movements of the average level of wholesale commodity prices as measured by well-known and accepted index numbers, are the simplest and, in many respects, the most important price phenomena, but they ignore and, to some extent, conceal the significance of the complex and confusing individual and group movements from which the average is compiled by a somewhat artificial calculation. Fluctuations in prices are of the greatest importance when they involve changes in price relationships. If all prices, including such prices as the wage rate of labour, were to fluctuate at the same rate in the same direction most economic relationships, with the notable exception of long-term contracts, would remain substantially unaltered. But the rise in the prices of goods and services which a group of persons buy in relation to the prices of goods and services which they sell has far-reaching effects upon business activity and economic welfare. For example, one of the most important economic relationships of this kind is the ratio

between the prices of agricultural products and of manufactured commodities.

Four Periods of Indian Price History during the last Decade

The last decade, which began roughly with the advent of the Great Depression in September 1929, has witnessed unprecedented and unforeseen changes in the price levels in the different countries of the world. Rupee prices in India have been inevitably affected by world price trends and they have produced far-reaching reactions on the country's economy. The price level in India during the last decade may be reviewed broadly under the following four principal periods: (1) Depression period (September 1929 to March 1933); (II) Recovery (partial) period (April 1933 to August 1937); (III) Recession period (September 1937 to August 1939); and (IV) War period (September 1939 to October 1940 for which statistics are available.)

These periods may now be successively examined with special reference to the magnitude, the course and the nature of the price change, the causes which account for the variations in prices and their effects on the country's economy.

I Depression Period, 1929 September to March 1933

During this period of the world economic depression rupee prices in India slumped heavily as shown by the table on page 737.

The disastrous drop in commodity prices, which started with the Wall Street collapse in U. S. A. in October 1929, and which soon caught the whole world in its tight grip was a signal for a steep fall of commodity prices in India as well. It will be seen from the table on page 737 that the index number for Calcutta wholesale prices fell from 143 in September 1929 to 82 in March 1933, a fall of 43 per cent. The index in September 1931 was 91 as against 143 in the same month in 1929. There was a temporary spurt in prices owing to dissociation of sterling from gold and the linking of the rupee to the sterling and in consequence the price level improved to 98 in December 1931. But this was purely an artificial rise as shown by the fact that there

was a continuous fall in prices in terms of gold. This advantage was not maintained in 1932 which saw a steady decline to lower levels, the index number falling to 88 in December 1932. The early months of 1933 saw a further weakness and the lowest level was reached in March 1933 when, as said before, the Calcutta price index stood at 82.

TABLE I

Index Numbers of Wholesale Prices in Calcutta by Groups of Articles.

Prices in July 1914=100. *(September 1929 to March 1933).*

Period.	Food-grains.							Textiles.									
	Cereals.	Pulses.	Sugar.	Tea.	Other Food Articles.	Oilseeds.	Oil, mustard.	Jute, raw.	Jute, Manufactures.	Cotton, raw.	Cotton, Manufactures.	Other Textiles (Wool and Silk).	Hides and Skins.	Metals.	Other raw and manufactured articles.	Building materials (Teak-wood).	All commodities.
Number of items included.	8	6	5	3	9	3	2	3	4	2	7	2	3	6	8	1	72
1914 End of July ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1929 September ...	128	155	164	129	170	175	113	90	122	146	161	131	109	130	144	151	142
1929 Annual Average ...	125	152	162	140	162	155	108	95	122	146	160	133	113	128	141	151	141
1930 " " ...	100	119	149	114	138	127	97	63	88	91	139	85	87	114	120	154	116
1931 " " ...	78	89	135	86	111	82	68	49	76	83	123	68	67	109	101	150	96
1932 " " ...	68	92	146	61	101	76	61	45	75	92	119	67	50	106	95	130	91
1933 " " ...	66	84	131	95	91	74	52	41	77	80	113	64	59	99	95	124	87
1933 March " ..	61	81	127	70	86	65	53	38	68	79	112	58	54	92	94	124	82

Comparative price falls in India and some foreign countries.

A feature of the world economic depression was the greater fall in the prices of primary products (food-stuffs and raw materials) as compared to those of manufactured articles. Agricultural countries like India were in consequence more adversely affected than industrial countries like the United Kingdom and U. S. A. as shown by the following table:

TABLE II

	India Calcutta July 1914=100	United Kingdom 1913=100	Japan October 1900=100	U. S. A. 1926=100	Australia 1911=100
1929 September	143	135·8	96·1	183·8	217·5
1933 March	82	97·6	60·2	133·3	177·4

As the World Economic Survey for 1932-33 points out the percentage decline in prices from the peak in 1929 to the lowest point reached during the depression was 42 in India as compared with 30·4 in the U. K., 38 in U. S. A., 28·5 in Australia and 35·8 in Japan. It will thus be seen that the price decline was the heaviest in India.

Disequilibrium between Agricultural and Industrial prices.

It is a truism that the trade cycle affects different kinds of prices in different ways, *e.g.*, the prices of agricultural commodities and raw materials and those of manufactured articles do not move necessarily together either on the upward or the downward grade of the trade cycle. In a period of falling demand, the prices of agricultural products normally decline much more rapidly than those of manufactured goods whose output is usually more promptly reduced to meet decline in purchases. A mainly agricultural country like India is, therefore, seriously affected by the price disparity which is illustrated by the falling index numbers of prices of exported articles (consisting mostly of raw materials) and imported articles (comprising of manufactured articles) shown in the following table:

TABLE III

Calcutta Index Number Series. (1914=100)

	Exported articles.	Imported articles.	Percentage fall as compared to September 1929 Exported Articles.	Imported Articles.
1929 September ...	133	150	...	...
1931 December ...	81	124	39	17
1932 December ...	69	115	48	23
1933 March ...	65	110	51	27

Thus while the export price level declined by 51 per cent, between September 1929 to March 1933, the import price level showed a fall of only 27 per cent. This marked discrepancy entailed a deterioration in the terms of barter trade between agricultural countries like India and industrial countries. The disparity of prices accounts for the heavier incidence of the depression in India than in other countries and also on the Indian agriculturist as compared to that on the Indian manufacturer.

Relative decline in individual commodity prices

The Table below indicates the percentage decline in the prices of different commodities between September 1929 and March 1933 and is based on the Calcutta Index Number of prices for various groups of articles.

TABLE IV

Percentage decline in prices on the basis of September 1929.

	March 1933		March 1933.
Rice ...	58	Hides and Skins ...	50
Wheat ...	34	Jute Manufactures	44
Tea ...	46	Cotton ,, ...	30
Oilseeds ...	63	Metals ...	29
Jute, raw ...	58	Sugar ...	23
Cotton, raw ...	46	All commodities	43

The above table brings out more clearly the main characteristic of Indian price index numbers during the depression period, namely, the larger fall in agricultural prices as compared with industrial prices. It will be seen

that the heaviest declines were invariably in raw materials. Among the manufactured articles the slump in prices of jute manufactures was heavier than in the prices of other articles, cotton manufactures and metals following in order. Among agricultural products sugar suffered least, mainly as a result of the increased import duties on this article.

Causes of the slump in prices

The drop in the Indian price level during the depression period was due partly to world factors and partly to domestic factors.

(a) *World factors*:—The main factors which contributed to the world economic depression and fall of prices were: (i) overproduction in case of raw materials and manufactured products, but particularly in the case of the former; (ii) monetary causes such as shortage or maldistribution of gold resulting in deflationary monetary policies, and (iii) political unrest in many parts of the world, notably in China and South Africa. The repercussions of the world conditions were inevitably felt in India and a heavy external pressure was exercised on the Indian price level in the downward direction.

(b) *Internal factors*:—In the first place, the civil disobedience movement in India aggravated the price fall partly by creating nervousness among the public and especially the business community and partly by "hartals" or suspension of business which brought down the demand for goods. In the second place, it has been generally argued in India that the overvaluation of the rupee at 1s. 6d. depressed prices in so far as it entailed the adoption of deflationary measures such as, currency contraction, control of credit, a high bank rate, etc. The rupee, like the sterling, no doubt depreciated following the abandonment of the gold standard by Great Britain in September 1931, but as against sterling the overvaluation of the rupee persisted as it was then linked to sterling at 1s. 6d. and this had an adverse effect on the Indian price level. It may be pointed out, however, that the rupee ratio factor, to the extent to which it operated, applied to the earlier period of non-adjustment rather than to the later period. It may be conceded, however, that if the rupee had

been devalued in terms of sterling as in Australia or Japan or had it been left to itself, the downward pressure on the Indian price level would have been somewhat relaxed. Finally, the reduction in the purchasing power of the Indian farmer resulted in diminished demand for manufactured goods. The consequential fall in the prices of manufactured goods in turn brought about a further fall in the prices of raw materials, thus setting up a vicious circle.

On a review of the external and internal factors which led to the steep fall of prices in India during the depression period it is obvious that the world factors were more to blame than the internal factors.

Effects of the price fall:—

The fall of prices during the period of the world economic blizzard produced disastrous and far-reaching results on Indian economy some of which are reviewed below.

(a) *Agriculture*:—First and foremost, the agriculturist was hard hit because his receipts dwindled owing to collapse of prices. The great fall in the prices of agricultural goods affected India's national income which shrank considerably as a result. The table below, giving a rough estimate of the value of the principal crops in each province, illustrates the shrinkage in the national income derived from agriculture:—

TABLE V

Value of total production of the principal crops considered in each Province in 1928-29 and 1933-34.

Province.	1928-29 Value in lakhs of Rs.	1933-34 Value in lakhs of Rs.	Change in value in lakhs of Rs.	Percentage decrease from 1928-29
Madras ...	1,80,78	83,17	−97,61	−54·0
Bombay ...	1,20,52	60,52	−60,00	−49·8
Bengal ...	2,32,59	95,56	−1,37,43	−58·9
United Provinces ...	1,40,52	85,65	−54,87	−39·0
Punjab ...	76,78	40,11	−36,67	−47·8
Burma ...	63,38	23,26	−40,12	−63·3
Bihar and Orissa ...	1,37,86	55,34	−82,52	−59·9
Central Provinces and Berar ...	68,78	30,33	−38,44	−55·9
Total ...	10,21,20	4,73,94	−5,47,26	−53·6

The fall was not uniform in the case of various agricultural commodities as shown above and the agricultural incomes of the several provinces were affected differently. For example, as compared with 1928-29, the largest decrease in the money value of agricultural produce (in this case rice) occurred in Burma, being 63·3 per cent in 1933. The drop in the value of total production of agricultural crops by Rs. 547 crores indicates the big setback to the purchasing power of the agriculturist.

While the prices of agricultural commodities fell by more than 50 per cent. during the depression period the costs of production fell only by 15 to 20 per cent. The incidence of the more or less fixed obligations of the agriculturist in the shape of land revenue, rent, debt charges, etc., became more and more onerous. This seriously aggravated the economic depression in the country, and along with the reduction in the income of the agriculturist, was responsible for the prevalence of acute distress in the rural areas. A symptom of this was the increase in rural indebtedness (as estimated by Dr. P. J. Thomas) from Rs. 900 crores for British India in 1928-29 to about Rs. 1,200 crores by 1933. Another symptom was the sale and export of large quantities of gold, although it is true that some of the gold which was sold and exported was not "distress gold." Yet another symptom was found in the reduction in the annual per capita consumption of cloth in India from 15·97 yards in 1929-30 to 13·49 yards in 1930-31, and 14·17 yards in 1933-34.

It is noteworthy that agricultural production as a whole did not contract as prices fell; indeed in some cases there was even a tendency to increase production to compensate for the fall in prices. Except in the year 1932-33 the net sown area in British India was more than in 1929-30, being 232 million acres in 1933-34 as compared with 228 million acres in 1929-30. There was some contraction in the area under cultivation of industrial raw materials like jute.

(b) *Industries*:—The industrial development of India could not escape the ravages of the slump in prices, which by reducing the purchasing power of the agriculturist lessened the demand for the products of industries. Moreover, the agricultural depression abroad reduced the demand for

Indian jute manufactures. The reduction in the prices of imported goods, often aggravated by currency devaluation abroad, stiffened foreign competition and served to accentuate the depression of prices of industrial products. With the decline in prices of industrial products there was an inevitable decline in industrial prices and share values, *e.g.*, the chain index for industrial profits with 1929-30 as 100 came down to 34 in 1932. Although industrial prices, profits and share values declined, it is noteworthy that industrial production was on the upgrade owing to the operation of certain favourable factors, such as the Swadeshi movement, the levy of protective tariffs (for instance, on iron and steel, textiles, and sugar), the Indo-Japanese Trade Agreement, low money rates and cheap imports of machinery and stores.

The depression in industry in the shape of lower industrial prices and profits resulted either in the closing down of industrial concerns (*e.g.*, some textile mills in Bombay) or curtailment of output as in the case of the jute mills and led in some cases to the introduction of wage-cuts which were the cause of a certain number of strikes in the country.

(c) *Trade*:—(i) *External trade*:—The price fall took a heavy toll in the field both of the external and internal trade and there was a big setback to the favourable balance of trade. Both our exports and imports were affected. Exports heavily declined owing to the diminished foreign demand for India's staple exports and the calamitous drop in the prices of agricultural raw materials. The quantity of export trade, however, did not decline in correspondence with the value. The fall in imports was the result of the reduced purchasing power of the Indian consumer, extension of home production of cotton textiles and sugar stimulated by the policy of tariff protection in India and the growing spirit of Swadeshi following in the wake of the tense political situation in the country. The following table brings out the effects of the depression on India's foreign trade and the balance of trade.

TABLE VI

Value (in crores of rupees) of sea-borne trade of India in merchandise (including Government stores.)

Year	Imports	Exports	Net exports of merchandise	Net exports of Gold.
	Rs.	Rs.	Rs.	Rs.
1928-29	263	339	+ 76	− 21
1929-30	250	319	+ 69	− 14
1930-31	173	226	+ 53	− 13
1931-32	130	161	+ 31	+ 58
1932-33	135	136	+ 1	+ 65

The above table shows that the fall in the case of exports was far greater than in the case of imports. This was but natural having regard to the heavier fall in agricultural prices than in industrial prices. Had it not been for the enormous quantity of gold exported from India since Great Britain went off the gold standard in September, 1931, the total visible balance of trade in favour of India would have dwindled to a negligible figure and the country would not have been in a position to meet its 'invisible' imports or obligations abroad.

(ii) *Inland Trade*:—Inland trade also received a set-back during the depression period as shown by the fact that the amount of goods carried by the Indian railways declined from 87·4 million tons in 1929-30 to 70·6 million tons in 1932-33, and the earnings from goods traffic from Rs. 68·8 crores to Rs. 56·9 crores.

(d) *Public Finance*:—The fall of prices also seriously affected public finance, Central (general as well as railway finance) and Provincial. There was a considerable deterioration of many of the important revenue heads, such as customs and income-tax and the earnings from commercial departments like railways and posts and telegraphs appreciably declined. The general budget of the Government of India showed heavy deficits which amounted to Rs. 40 crores during the years 1931-32 and 1932-33. The deficit had to be met by additional taxation amounting to Rs. 22 crores,

salary cuts and retrenchment. The railway finances were also thoroughly unsatisfactory as shown by the fact that the railway surplus which amounted to 7·8 crores in 1928-29 totally vanished in 1930-31 and there was a huge railway deficit amounting to Rs. 25 crores during the period ending 31st March, 1932. During this period the railways ceased to make any contribution to the general revenues. Provincial finances were also in a parlous condition.

(e) *Currency Exchanges and Banking*:—Reference has already been made to the controversy regarding the over-valuation of the rupee during the depression period. The fall of prices by giving a setback to our exports increased the difficulties of the Government in maintaining the rupee ratio at 1s. 6d. sterling. But with the commencement of the large export of gold following the departure by Great Britain from gold standard in September, 1931, the situation under-went a remarkable change and the rupee-sterling exchange remained firm with the support of plentiful supply of sterling against exports of gold.

As regards Indian banking, while the country was spared the shock of a banking crisis as in U.S.A., the effects of the depression on the banking business were reflected in the fall in the amount of cheques cleared from Rs. 2,038 crores in 1929 to Rs. 1,577 crores in 1932-33 and Rs. 1,619 crores in 1933. Bank deposits, however, remaied steadly round about 215 crores owing among other factors to the lack of free investment of floating funds and the transfer of part of the proceeds of gold exports to banks. Money rates came down as the depression deepened from an average bank rate of 6·33 in 1929 to 3·50 in 1933, as a result of the slump in business, low level of commodity prices and the pressure of floating funds in the money market.

II. Recovery (partial) Period (April 1933 to August 1937).

The table on page 747 indicates the price trend in the period of partial economic recovery which became notice-able from April 1933 and lasted till August 1937.

The course of general prices in this period may now be reviewed. The Calcutta index number of wholesale prices having touched the bottom level (82), in March 1933 steadied itself thereafter and stood at 89 in December 1933. January 1934 saw an improvement by 1 point which was lost in the succeeding month, while in March there was a fall to 88. During 1934-35 the price level generally fluctuated within a margin of 2 points from this level, the changes being more often in the upward direction. January 1935 was, however, an exceptional month and saw a sharp rise by 6 points from 88 in the preceding month. This advantage was only temporary and was due to speculative rise in the price of cereals and oilseeds. Thereafter there was a relapse and in April 1936 the index number stood at 90. Later there was a limited recovery and in April 1936 the index rose to 94. Subsequently there was a quicker recovery of prices which advanced by as much as 11 points by August 1937, when the Calcutta index attained its maximum at 105.

TABLE VII

Index Numbers of Wholesale Prices in Calcutta by Groups of Articles.

Prices in July, 1914=100. *(April 1933 to August 1937).*

Period.	Food-grains.							Textiles.									
	Cereals.	Pulses.	Sugar.	Tea.	Other Food Articles.	Oilseeds.	Oil, mustard.	Jute, raw.	Jute Manufactures.	Cotton, raw.	Cotton Manufactures.	Other Textiles (Wool and Silk).	Hides and Skins.	Metals.	Other raw and manufactured articles.	Building materials (Teakwood).	All commodities.
Number of items included.	8	6	5	3	9	3	2	3	4	2	7	2	3	6	8	1	72
1914 End of July ...	100	100	100	100	100	100	100	106	100	10	100	100	100	100	100	100	100
1933 March ...	61	81	127	70	86	65	53	38	68	79	112	58	54	92	24	124	82
1933 April ...	58	81	129	71	89	68	51	46	76	80	112	54	52	95	95	124	84
1933 December ...	70	79	124	130	92	77	48	38	75	68	114	65	62	101	99	124	89
1934 Annual Average ...	69	84	125	131	97	92	53	39	77	73	115	64	51	101	95	122	89
1935 January ...	79	94	126	106	103	116	121	47	81	86	119	64	60	99	88	114	94
1935 Annual Average ...	75	85	128	112	101	107	78	50	74	78	117	77	59	106	84	113	91
1936 " " ...	79	77	121	125	109	101	69	50	64	89	111	94	70	101	83	103	91
1937 " " ...	77	89	102	144	125	115	75	56	67	89	117	126	81	144	92	117	102
1937 August ...	78	89	102	151	129	119	80	55	67	83	115	135	81	154	96	119	105

Price Recovery in India and Abroad Compared

This brief review of the course of general prices in India in the partial recovery period shows that the rise of prices in India was very slow and painful and occasionally received setbacks. This stands in marked contrast with the continuous upward movement of the price level in some leading countries of the world as the following Table shows:

TABLE VIII

1929=100

	India Calcutta.	U. K.	U. S. A.	Australia.	Japan.
Average					
1933	61. 7	75. 0	69. 3	78. 2	81. 6
1934	63. 1	77. 1	78. 7	81. 6	80. 8
1935	64. 5	77. 8	83. 9	81. 5	84. 4
1936	64. 5	82. 7	84. 8	85. 6	89. 9
1937	72. 3	95. 2	90. 6	91. 9	108. 4
1937 Aug.	74. 5	79. 5	91. 8	95. 4	107. 0

Prices in India followed a more or less parallel course to those in the United Kingdom and U.S.A. upto March 1933 when the lowest level was reached as compared with 1929. The rise thereafter was not, however, comparable, the highest point attained by the Indian index being about 75 in August 1937 as compared with 97·5 in the United Kingdom and 91·8 in U.S.A. in the same month. During the first three years of the recovery the rise in the prices of commodities in which the Indian farmer is interested was very slow and halting. It is only from the middle of April 1936 that prices showed a definitely upward trend.

Rectification of the disparity between Agricultural and Industrial prices

The following Table shows that there was a gradual rectification of the disparity between agricultural and

industrial prices which was particularly marked after the middle of 1936.

TABLE IX

Calcutta Index Number Series, (1914)

(1914 = 100)

Percentage fall in prices as compared with September 1929.

	Exported Articles.	Imported articles.
March 1933 ...	51	27
December 1933 ...	45	25
December 1934 ...	43	27
December 1935 ...	36	27
December 1936 ...	32	30
March 1937 ...	29	25

The prices of imported manufactured goods thus adjusted themselves more or less to the level of raw materials exported, as shown by the fact that the level of export prices was only 29 per cent below in March 1937 as compared with 25 per cent in the case of imported articles with 1929 as the base. The rapprochement between the two blades of the price scissors had a beneficial effect on the economic conditions of an agricultural country like India.

Causes of the (partial) recovery of prices:—

(a) *General recovery*:—India in common with the rest of the world shared in the gradual economic recovery and the rise of prices, which was in evidence in 1933 and which gathered momentum in the years that followed despite the disturbing forces generated by the growing political and economic nationalism. In 1936 the world definitely emerged from the parlous conditions of the great depression, and progress was kept up till April 1937 when the forces of recovery received a setback owing to the advent of what is popularly known as the 'recession.' The causes of the world recovery were: the gradual depletion of stocks of

primary commodities, the regulation of production under various restriction schemes, the devaluation of the gold *bloc* currencies and adoption of measures for national recovery, including cheap money policy. The consequential rise in prices became striking during the first half of 1937 owing to the influence of heavy expenditure on armaments in many countries, which gave a stimulus to the heavy industries and had an exhilarating effect on the general economic situation by stimulating investment and greater employment.

(b) *Economic Recovery of India*:—India followed the general world trend towards recovery. The course of her recovery, however, was somewhat different from that of other countries, owing to her special conditions and her predominantly agricultural character in spite of her industrialization in recent years. India's prosperity depends more on the prosperity of her agriculture, and what concerns India most is the rise in the price of agricultural products and the snapping of the disparity between the price levels of agricultural and industrial commodities. Although the improvement of agricultural prices began somewhat previously it was only during 1936-37 that there was an appreciable rise in prices of Indian agricultural products. Prices even in that year were, however, much lower in the case of most commodities than in 1928-29. The marked improvement in 1936-37 was chiefly the result of the general recovery in the world demand for primary commodities and raw materials and the armaments boom.

Effect of the partial recovery of prices:—

(a) *Agriculture*:—It has already been pointed out that the recovery of agricultural prices in India was very slow and uneven. Until the middle of 1936 the improvement in the economic condition of the agriculturist was not satisfactory. The situation, however, showed a welcome change about the middle of 1936, partly owing to the more rapid advance of agricultural prices and partly owing to the narrowing down of disparity between the agricultural and industrial prices. The enhanced purchasing power of the ryot was reflected in increased imports and rise in the *per capita* consumption of cloth which stood at 15·54 yards in

1936-37 as compared with 13·49 yards in 1930-31. While there was thus some improvement, much leeway had to be made up even in August 1937 when the price recovery reached its maximum, as the prices then current were very much below the 1929 level.

This period is marked by the adoption of several measures for assisting agricultural recovery, such as regulation of moneylending, debt relief schemes, establishment of land mortgage banks, improvement of agricultural marketing, village uplift, etc. While these measures gave a limited relief to the agricultural population they were not comparable with the far bolder and comprehensive measures adopted in other countries, especially in U.S.A., and there was considerable agitation in the country for devaluation of the Rupee with a view to raising prices to a remunerative level. It may be added that the Government of India convened a Crop Planning Conference in 1934, but no tangible results have so far materialised.

(b) *Industries*:—The first definite signs of an upward movement of industrial conditions made their appearance in India during or after the year 1932 as in the case of other countries of the Sterling group. Production in all the industries except coal recorded considerable increases. The largest increase was in the case of sugar, next largest being in the case of cotton piecegoods. Cement, iron and steel, paper and jute manufactures also registered substantial increases. The factors favourable to industrial development which had made their appearance during the depression period continued to operate during the period of partial recovery and served to neutralise the depressing effect of the low purchasing power of the agriculturist. With the pronounced upward trend of agricultural prices, the revival of foreign demand for agricultural staples and the increased purchasing power of the agriculturist, in the early months of 1937 there was in evidence a great activity in the various commodity and share markets. Optimism and confidence pervaded the business community leading to the familiar symptoms of the trade cycle, namely, speculation and overtrading. This is shown by the fact that the Index number of industrial ordinary shares which had dropped to 66 in

1931-32 rose to 117 in 1936-37 and stood at 137 in March 1937.

The recovery of industrial prices and profits led to a demand for higher wages and restoration of wage cuts and caused a recrudescence of labour troubles in Bombay, Ahmedabad, Cawnpore, Madras and other industrial centres. Wage increases were in some cases granted in 1938 on the recommendations made by Labour Enquiry Committees appointed by Provincial Governments.

(c) *Trade.* (i) *External Trade*:—India's foreign trade, especially the export trade, experienced a considerable recovery praticularly in 1936-37, although as compared with 1928-29, the pre-depression year, exports still lagged behind by nearly 40 per cent and imports by 50 per cent. The following Table brings out the effects of the recovery on India's foreign trade:

TABLE X

Value of Sea-borne Trade in total merchandise including Government Stores.

Year	Imports	Exports	Net Exports	Net Exports of Gold.
	Rs.	Rs.	Rs.	Rs.
1932-33	135·02	136·07	+ 1·0	+65
1933-34	117,31	150·23	+32,92	+57,05
1934-35	134·59	115·04	+20·45	+52·54
1935-36	134·43	164·29	+29·86	+37·35
1936-37	125·24	202·37	+77·13	+27·85

The trade balance which had been reduced to a negligible figure in 1932-33 showed a welcome revival, and although gold exports still continued they showed a steady contraction.

(ii) *Inland Trade*:—The inland trade also shared in the betterment of agriculture and industry. The recovery is reflected in an increase in the total quantity of the main commodities of the inland trade from 628 million maunds in 1933-34 to 737 million maunds in 1936-37, as also in goods traffic earning of Indian railways.

(d) *Public Finance*:—There was a welcome financial recovery in the public finances of India during the recovery period. The year 1934-35 and the subsequent years were marked by surplus budgets. Even the railway finances turned the corner in 1936-37 and showed a surplus of net receipts over interest charges for the first time after several years. Provincial Budgets also shared in the general economic improvement.

(e) *Currency, Exchange and Banking*:—The currency and exchange situation during the recovery period was characterised by the steadiness of the Rupee-Sterling exchange, thanks to the increasing favourable balance of trade and the continuous exports of gold. The rupee ratio controversy which had abated for some time flared up again with the devaluation of the currencies of the Gold *bloc*. An unsuccessful attempt was made to secure devaluation of the rupee in the Central Legislature with a view to raising the level of agricultural prices in India.

The increase in business and prices stimulated by the recovery resulted in the expansion of note circulation from Rs. 168·73 in June 1936 to 196·14 crores in August 1937. The advances of the scheduled Banks also showed a substantial increase from Rs. 95·05 crores to Rs. 122·56 crores in April 1937. Clearing House returns in April 1937 were 85 per cent larger than during the same month in the previous year. The Bank rate, however, remained unchanged at 3 per cent.

III. Recession Period.

September 1937 to August 1939

Recession of prices:—The table on page 755 indicates the recession in prices in India following the recession in business conditions in U.S.A. and other countries of the world about the middle of 1937. It has already been shown that the Calcutta index reached its highest point of 105 in August 1937. Thereafter, in sympathy with the general fall in commodity prices it steadily declined and reached its lowest point of 94 in April 1938 and remained unchanged till June 1938, a fall

of $10\frac{1}{2}$ per cent. From July 1938 to January 1939 the index was steady at 95. In February 1939 the index rose to 98 but slightly receded to 97 in March. The average index for 1938 was 95 as compared with 102 in 1937, a fall of 7 per cent. Most of the groups of articles taken for the Calcutta index registered declines in 1938 as compared with 1937, the largest being under raw cotton, a drop of nearly 25 per cent. Hides and skins declined in value by 21 per cent and wheat by 19 per cent. Prices of raw jute and jute manufactures declined by $12\frac{1}{2}$ per cent and $7\frac{1}{2}$ per cent and those of tea, cotton manufactures and oilseeds by 10 per cent, 9 per cent and 8 per cent respectively. On the other hand, sugar prices appreciated by 29 per cent mainly on account of the shortage of the sugar crop in 1938. Thus most of the items included in the Calcutta index registered a decline in 1938, the largest being mostly under primary commodities such as raw cotton, wheat, raw jute, tea and oilseeds. It may be mentioned, however, that the prices of raw jute and jute manufactures rose sharply in the first few months of 1939 following an agreement among the jute mills regarding hours of work and a large order for sand-bags from the United Kingdom.

As regards the course of commodity prices from April 1939 to August 1939 (*i.e.*, before the outbreak of the war), it may be pointed out that there was only a slight rise as shown by the fact that the Calcutta index, which stood at 97 in March 1939, rose to 101 in May, but lost 1 point in the following two months, so that it stood just at the same level (100) as in the last pre-war year 1914. The uncertain European situation and the 'shadow' war, however, hampered sustained recovery.

TABLE XI

Index Numbers of Wholesale Prices in Calcutta by Grops of Articles.

Prices in July, 1914=100. (*August 1937 to August 1939*).

Period.	Food-grains.							Textiles.									
	Cereals	Pulses.	Sugar.	Tea.	Other Food Articles.	Oilseeds.	Oil, mustard.	Jute, raw.	Jute Manufactures.	Cotton, raw.	Cotton Manufactures.	Other Textiles (Wool and Silk).	Hides and Skins.	Metals.	Other raw and manufactured articles.	Building materials (Teak-wood.	All commodities.
Number of items included.	8	6	5	3	9	3	2	3	4	2	7	2	3	6	8	1	72
1914 End of July ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1937 August Average ..	78	89	102	151	129	119	80	55	67	83	115	135	81	154	96	119	105
1938 Jan. Annual Average	71	90	106	136	124	118	80	48	62	74	111	91	74	147	95	124	99
1938 April ...	67	83	125	134	108	104	75	45	57	68	111	85	67	140	83	124	94
1938 December ...	78	93	147	120	100	107	75	52	68	66	101	83	60	141	89	124	95
1938 Annual Average ...	72	88	132	130	109	106	77	49	62	67	106	83	64	140	91	124	95
1939 January ...	76	94	143	124	105	04	75	59	73	63	103	74	62	141	90	124	96
1939 March ...	79	90	161	122	105	100	80	71	80	63	102	84	63	139	88	124	97
1939 April ...	81	92	170	125	109	100	80	90	86	62	101	83	63	141	88	124	100
1939 May ...	83	94	174	133	113	103	80	82	82	67	99	80	61	141	91	121	101
1939 August ...	83	96	162	140	114	101	80	57	79	64	97	90	63	142	93	121	100

The Course of prices in India, United Kingdom and United States

The following table gives index numbers of wholesale prices in India, the United Kingdom and U. S. A. during the recession period:

TABLE XII

1929=100

Year		India	United Kingdom	U. S. A.
1937 July	...	73·8	97·6	92·2
1937 August	...	74·5	97·5	91·8
1937 Average	...	72·3	95·2	90·6
1938 January	...	70·2	94·3	84·9
1938 April	...	66·7	90·3	82·6
1938 December	...	67·4	86·1	80·8
1938 Average	...	67·6	88·8	82·5
1939 March	...	68·1	84·6	80·5

The reversal of the general price trend, of which the first sign was the sharp break in raw material prices in the spring of 1937, found expression in the wholesale price indices in most countries. Prices continued to fall on the whole until late in 1938, in conformity with the price movements in the world markets. Except for the peculiar circumstances of sugar, raw jute and jute manufactures noticed above, prices in India, the United Kingdom and U. S. A. moved more or less in a parallel direction, although the maximum and minimum price levels did not always coincide in point of time.

Disparity of Agricultural and Industrial Prices:

The process of rectification of the dissimilarity of agricultural and industrial price movements in the partial recovery period was once again disturbed during the recession period. This is shown by the fact that during this period the export price index (1914=100) came down from 88 in

August 1937 to 68 in February 1939 as compared to the import price index, which declined from 83 in September 1937 to 73 in February 1939. This confirms the thesis that the prices of primary commodities are more sensitive to cyclical fluctuations than the prices of finished goods. In this respect primary commodity prices behave much as the prices of equity shares do; the movements of both reflect not only the *de facto* situation, but as it is expected in the near future. The greater fall of agricultural prices naturally entailed a deterioration in the barter terms of trade of agricultural countries like India and an improvement in those of industrial countries during the economic recession.

Causes of Recession of Prices:

The most important factor responsible for the setback to prices in India was the sharp recession of prices of primary commodities, which commenced in U. S. A. about April 1937 and which gathered momentum as the year wore on. The sudden reversal of the upward trend in business conditions was caused by the unhealthy conditions created in the markets by large orders for forward delivery by industrial and other consumers of raw materials under influence of a feeling of nervousness regarding future shortage of raw materials supplies. The recession was caused by the inevitable pricking of the bubble of speculation combined with other factors, such as the gold scare in U. S. A., the warning uttered by President Roosevelt that prices were rising too fast and too high, the impact of the British National Defence Contribution Budget in 1937, the restrictions placed on credit facilities by Banks and the relaxation of restriction schemes under boom conditions. With the reversal of the boom in the world markets for primary commodities, the prices of most Indian staple products declined very sharply. The downward trend in India was accentuated by the prolonged Sino-Japanese hostilities which seriously curtailed the trading capacity of India's principal customer for cotton.

Fortunately, the recession did not culminate into a major depression as in 1929 and it appeared to be receding from June 1938. This is partly explained by the adoption

of a policy of monetary expansion and of increased public expenditure all over the world, especially in U. S. A., and secondly, because of the huge expenditure on armaments which helped to maintain economic activity. At the same time, the "shadow" war, thus endangered, deepened the feeling of nervousness and uncertainty regarding the future and thus hampered economic recovery in the period preceding the outbreak of the present war.

The Effects of Recession of Prices:

(a) *Agriculture*:—As during the previous depression, the fall of prices in the recession period adversely affected the income and the purchasing power of the Indian agriculturist, especially in cotton and jute tracts, and revived the entire sequence of the adverse economic reactions on rural economy previously described. The distress in the rural areas, however, was less acute than during the previous depression, as firstly, the price decline was not as steep as during the Great Depression and secondly, the adoption of certain Debt Relief and other ameliorative measures, previously indicated, had given a limited relief to the rural community. On the whole, however, there was a setback to the economic conditions of the agricultural population.

(b) *Industries*:—The progress of industrial recovery in the earlier period was marred by the advent of the recession. Industries resisted the downward movement for some time, but after October 1937, when the world conditions deteriorated further, the resistance of most Indian industries gave way and they succumbed to the general depression in the commodity and share markets. The setback in the industrial share market is indicated by the drop in the index of industrial shares from the highest level of 138 in March 1937 to 100 in June 1938. Industrial prices and profits also sagged, although industrial production was not affected. Indeed, excepting sugar and jute, it was at a higher level, and in many cases attained a record figure. An upward movement in the commodity markets and on the stock exchanges was noticeable at the end of June 1938 following early signs of recovery in U. S. A. and the United Kingdom, but the improvement was not maintained, the tense interna-

tional situation being one of the depressing factors. The same factors militated against a sustained recovery in the first eight months of the year 1939 prior to the outbreak of the war. The economic situation was worsened by the depression in the prices of wheat and coffee and the difficulties of the cotton textile industry, which had been experiencing one of the worst slumps owing, among other reasons, to over-production, additional taxation and increased cost of living. There was generally a dull feeling in the industrial share market with the exception of the iron and steel shares, which were steady owing to sustained production in the industry.

(c) *Trade* (*i*) *External Trade*:—The following table indicates the position of the overseas trade of India (excluding Government transactions and Burma which was separated from British India as from April 1, 1937) during the recession period:

TABLE XIII

In crores of Rupees.

Year	Imports	Exports	Net exports of merchandise	Net exports of gold
1936-37	141·10	192·29	+51·19	+27·86
1937-38	173·33	182·21	+15·88	+16·34
1938-39	151·79	169·35	+17·56	+13·05

The overseas trade of India in 1937-38 compared with the previous year showed an expansion in imports and was accompanied by a decrease in exports with the result that the net exports of private merchandise declined from Rs. 51 crores to Rs. 17.5 crores. It is well known that imports lag behind exports in the case of Indian trade and the larger increase in the volume of India's total exports after the trade recovery started in the year 1936, led to the larger imports in the year 1937-38. The figures for the year 1938-39 clearly bring out the effects of the recession on the foreign trade of India. The total value of India's foreign trade in

private merchandise declined from Rs. 363 crores in 1936-37 to Rs. 322 crores in 1938-39 mainly in consequence of the recession of business activity and the consequent shrinkage in the world trade. The fall of as much as Rs. 41 crores in exports was a result of the reversal of the boom conditions in the primary markets of the world and was aggravated by reduced purchases of Indian cotton by Japan; while the fall in imports was caused by the smaller purchasing power in the hands of the agriculturist. The larger decrease in imports improved the trade balance by a couple of crores as compared with the previous year. The net exports of gold also showed a decline. The net visible balance was thus considerably reduced.

(ii) *Inland Trade*:—The inland trade, which had increased in volume in the last few years received a slight check in 1938-39 when it stood at 781 million maunds as compared to 785 million maunds in 1937-38.

(d) *Public Finance*:—Despite the recession of trade and prices the Central Government succeeded by means of economies in administration, limited increase in taxation, the postponement or abandonment of schemes involving expenditure and in presenting a series of balanced budgets. The railway budget also continued to show a surplus, although the surplus in 1938-39 was Rs. 139 lakhs below the previous year. Provincial budgets, however, showed a deficit of Rs. I crore in 1938-39 and Rs. 1.13 crores in 1939-40.

(e) *Currency, Exchange and Banking*:—The wide fluctuations in the trade of an agricultural country like India subject its exchange relationship with the outer world to a strain. Alternately there is stress on the upper and lower exchange peg depending on the upswing and downswing of the trade cycle. This thesis was illustrated in the recession period when, owing to the cumulative effect of the decline in the exports of merchandise and of gold, there was an adverse reaction on the course of the rupee-sterling exchange, which declined to the statutory lower point of 1s. $5\frac{49}{64}$ d. in the first week of June 1938. This stimulated an unsuccessful attempt to secure a revision of the rupee ratio. Following the improvement in India's trade balance the exchange remained steady.

The recession was responsible for a net return of currency to the extent of Rs. 14.75 crores in 1937-38 and of Rs. 9.62 crores in 1938-39 as compared to the net absorption of currency of Rs. 23.04 crores in 1936-37.

Money rates eased off in consequence of the decrease in the trade demand, and the low commodity price level in the recession period and short-term money was unlendable even at ¼ per cent. The Bank rate remained throughout at the low level of 3 per cent. Clearing House returns decreased from Rs. 2,051 crores in 1937-38 to Rs. 2,012 in 1938-39.

IV. War Period.

(September 1939 to October 1940.)

The table on page 763 indicates the price trend and the wide variations in general prices during the war period from September 1939 to October 1940 for which figures are available.

Upward Swing in Prices:

Although wholesale commodity markets had shown a slight upward trend during the beginning of the year 1939, it was not until the outbreak of the war in September 1939 that there was any substantial rise in the general commodity price level. In common with most other parts of the world the outbreak of the war was followed in India by a general rise in commodity prices. The Calcutta index number of wholesale prices recorded a rise from 100 in August 1939 to 114 in September 1939, the first month of the war. The prompt initiation of price control by Provincial Governments in exercise of powers delegated to them by the Central Government under the Defence of India Ordinance, arrested the upward trend in the markets for some time, but it reappeared in the form of increased speculative demand for all staple products. The rise which began with intense speculative activity in the jute market communicated itself rapidly to cotton, cereals and other sections of the market and the index number rose from 118 in October to 131 in

November during which month the commodity markets developed a strong bullish tendency. Irregular movements were in evidence in December, but despite occasional setbacks prices generally continued at a higher level than in the previous month. Speculation was rampant and prices attained a fresh peak during the earlier part of the month, having risen from 131 in November to 137 in December.

Break in Prices:

Having reached their peak in January 1940, prices, somewhat unexpectedly, came down month by month during the first six months of the year 1940 to such an extent as to adversely affect economic conditions in the country. A considerable part of the rise in prices which had followed the outbreak of the war in September was thus lost. The process of adjustment between the different markets and the different parts of the price system, which had begun in January 1940, continued in February and the Calcutta index number which had dropped to 130 in January declined further to 126 in February. During the early part of March there was a limited revival of optimism but the markets were unable to get over the depressing influence of other factors, and by the end of March the Index number had fallen to 121. With the worsening of the war situation in April and the loss of Continental markets there was a sharp downward trend of prices and in some cases they almost reached prewar levels. The Calcutta index number revealed a steady fall and stood at 117 in May and 114 in June and July. Since August 1940 there has been a limited recovery of prices as shown by the fact that the index number gradually moved and stood at 121 in October 1940.

TABLE XIV

Index Numbers of Wholesale Prices in Calcutta by Groups of Articles.

Prices in July, 1914 = 100. (*September 1939 to October 1940*).

Period.	Food-grains: Cereals.	Food-grains: Pulses.	Sugar.	Tea.	Other Food Articles.	Oilseeds.	Oil, mustard.	Textiles: Jute, raw.	Textiles: Jute Manufactures.	Textiles: Cotton, raw.	Textiles: Cotton Manufactures.	Other Textiles (Wool and Silk).	Hides and Skins.	Metals.	Other raw and manufactured articles.	Building materials (Teak-wood).	All commodities.
Number of items included	8	6	5	3	9	3	2	3	4	2	7	2	3	6	8	1	72
1914 End of July ...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1939 August ...	83	96	162	140	114	101	80	57	79	64	97	90	63	142	93	121	100
1939 September ...	93	105	166	151	135	107	80	77	117	82	108	163	72	154	98	123	114
1939 October ...	93	104	161	152	155	107	80	76	126	79	107	168	74	153	103	123	118
1939 November ...	100	119	169	164	166	123	90	119	175	111	126	163	77	158	105	127	131
1939 December ...	105	119	174	163	171	126	85	130	172	122	135	164	84	172	118	127	137
1940 January ...	97	116	169	154	161	119	77	124	146	113	131	155	84	166	116	127	130
1940 February ...	99	103	158	134	157	113	80	130	130	110	124	147	84	161	118	127	126
1940 March ...	97	99	169	130	143	110	75	100	114	103	121	146	82	170	121	127	121
1940 April ...	98	102	165	130	141	113	75	99	111	108	126	145	82	174	113	127	121
1940 May ...	95	98	163	126	141	111	78	85	97	79	124	146	76	172	112	127	117
1940 June ...	95	97	165	131	136	97	80	80	94	68	119	134	64	172	112	127	114
1940 July ...	97	100	151	130	136	103	75	63	95	82	119	118	64	171	117	127	114
1940 August ...	98	101	153	153	138	99	80	53	85	78	117	126	64	182	115	127	115
1940 September ...	99	101	150	164	147	104	85	53	101	80	119	159	64	182	112	127	119
1940 October ...	101	102	152	191	154	102	80	50	103	76	123	166	61	183	113	127	121

Fluctuations in Individual Commodity Prices:

During the first four months of the war there was a feverish rise in the prices of several commodities. Between August and December 1939 the price of raw cotton doubled itself, the index number rising from 64 to 122. The index for cotton manufactures rose from 97 to 135 during the same period. Raw jute and jute manufactures showed even greater rise, owing to the demand for sand-bags from the British and French Governments, from 57 and 79 in August 1939 to 130 and 172 in December 1939 respectively. Thereafter, as already mentioned, prices registered heavy declines and the general index of prices stood at the lowest level in Juse 1940. The following table indicates the wild fluctuations in commodity prices during the year from 30th June, 1939 to 29th June, 1940.

TABLE XV

	Price as at 30-6-1939			Peak price for 1939-40			Price as a 29-6-1940.		
	Rs.	as.	p.	Rs.	as.	p.	Rs.	as.	p.
Cotton (Broach per candy)	160	0	0	327	0	0	156	0	0
Jute (Tops per maund)	9	4	0	19	8	0	11	0	0
Paddy (Burma) per 100 baskets	101	0	0	127	0	0	122	0	0
Wheat (per maund)	2	2	9	3	9	3	2	7	9
Groundnuts (per candy)	26	0	0	31	0	0	24	0	0
Tea (per lb.)	0	10	11	0	12	10	0	10	2

The above table illustrates the steep oscillations in the prices, especially of cotton and jute and the break in prices after having reached peak levels towards the beginning of 1940.

Prices in India, United Kingdom and United States of America

The following two tables illustrate the effects of the war on the commodity price levels in India, the United Kingdom and the United States of America:

TABLE XVI

Index Numbers of Wholesale Prices.

1929=100

	Calcutta	The United Kingdom	The United States of America
1939 August ...	71	86	79
1939 September ...	81	92	83
1939 October ...	84	97	83
1939 November ...	93	104	83
1939 December ...	97	107	83
1940 January ...	92	110	83
1940 February ...	89	113	82
1940 March ...	86	113	82

TABLE XVII

Weekly Index of Wholesale Prices in India (Economic Resources Board), *and of United Kingdom and United States of America.* (Bank of England's Index Numbers).

Base: Week ending 19th August, 1939=100.

Week ending	India.	United Kingdom.	United States.
January 6, 1940 ...	139.3	127.3	119.6
April 27, 1940 ...	125.0	134.0	117.0
May 25, 1940 ...	120.8	135.1	115.0
June 29, 1940 ...	110.3	137.7	110.3
July 27, 1940 ...	112.2	138.2	106.8
August 24, 1940 ...	110.4	138.3	102.9
September 28, 1940	111.1		

It will be seen from the two tables that while the outbreak of the war was followed by a general rise in commodity prices in all the three countries, variations in the index numbers of the wholesale prices in India have been more erratic than those in the United Kingdom and the United States of

America. As already observed, the Calcutta index number of the wholesale prices having reached its peak in December 1939 began to sag. It is only during the last few months that a limited recovery of prices is in evidence. On the other hand, the index number of prices in the United Kingdom shows a steady, continuous upward trend of prices. It is interesting to note that while during the eight months of 1939 preceding the outbreak of the war, the wholesale prices in the United Kingdom rose by only 0·6 per cent, during the last four months covering the war period, the rise was 24·5 per cent. During the first twelve months of the war the average level of wholesale prices of commodities as measured by the London Times index number rose by 37·6 per cent from 114·5 (1913=100) on August 30 to 157·5 on August 30, 1940, which was the highest price level attained for ten years. On the other hand, taking the Calcutta index number series with 1914=100 as the base, it is found that the index number having reached the peak level of 137 in December 1939 slumped heavily and came down to 114 in June 1940. Since then there has been a gain of only 7 points as stated above. As regards the price level in U. S. A. the price index indicates a smaller rise than both in India and the United Kingdom. It also shows a recession as in India since January 1940 though it is not so steep as in India.

Disparity of Agricultural and Industrial Prices:

The following table shows index numbers of prices based on the declared values of Indian exports and imports:

TABLE XVIII

1927-28=100

		Exports	Imports.
April 1939	...	54	68
July 1939	...	60	66
February 1940	...	83	81
April 1940	...	76	89
July 1940	...	72	82

It will be seen that the war, by raising agricultural prices of staple agricultural commodities in India during the earlier period, almost bridged the gap between agricultural and industrial prices as measured roughly by the declared values of exports and imports. Owing to the slump in prices during the second half of the war period the gap has again been widened to the disadvantage of agricultural export prices as in the previous depression (1929—33) and the recession (1937—39) periods. This has brought about once again the worsening of the barter terms of trade between India and the industrial countries.

Causes of wide variations of the price level in India during the war period:

(i) *The upswing in prices (September 1939 to December 1939)*:—Following the outbreak of the war commodity prices took an upward trend owing to the belief that the intensification of economic warfare meant brighter prospects for Indian industries and agriculture. The acceleration of the export movement following the increased demand for Indian produce, the decline in imports owing to greatly increased insurance costs and the difficulty of obtaining freight, domestic buying for profiteering or for providing for future shortage, holding back of supplies for high prices, speculative operations in the markets and the general optimism both as regards the future trend of commodity values as well the volume of offtake were the principal factors which account for the jump in prices during the first four months (September 1939 to December 1939) of the war period.

(ii) *Downward trend of prices*:—(January 1940 to July 1940):—The causes of the sudden reversal of the upward trend of prices from January 1940 to July 1940 may now be indicated. In the first place, there was the inevitable reaction to the excessive speculative activity during the first four months of the war. In the second place, the prompt institution of price control, fears of increased Government control of prices and rumours of a possible scheme for prohibiting or regulating 'futures' markets had a depressing influence on the price level. In the third place, the

publication of the Excess Profits Tax Bill on the 27th January, 1940 acted as a bear factor and led to a further drop in commodity prices. During May and June following adverse war developments in Europe and the virtual loss of the estire European market to India with the exception of Great Britain, the prices of the principal export commodities fell precipitously and in some cases touched the pre-war level. Underlying this reversal of the price trend were other contributory factors, such as freight difficulties, restrictions on exports and exchange control essential for the prosecution of the war, and crop prospects, *e.g.*, a liberal jute crop. Finally, as Sir James Taylor, Governor of the Reserve Bank of India, pointed out in his speech at the last Annual General Meeting of the Shareholders of the Reserve Bank held on 5th August, 1940, the withdrawal of more than Rs. 40 crores of value from the credit structure of the country and its locking up in useless metal has undoubtedly been one of the most important contributory factors to the dislocation in the up-country bazaar trade on which the prosperity of the country so largely depends. If dealers do not take up their usual stocks of commodities but lock away their money instead, prices must slump and trade come to a standstill.

Slow Recovery of Prices:

Since August 1940, as indicated above, there has been a slight recovery of commodity prices as shown by the upward movement of the Calcutta index number from 114 in June and July 1940 to 121 in October 1940, which was, however, several points below the peak reached by it in December 1939. It appears that after the unsettlement created from January to June Indian business activity has resumed its upward course. Intensification of India's war effort under the guidance of the War Supply Department of the Government of India has been a bull factor for the market. Efforts are being made to harness India's economic resources to the task of making her a great arsenal for supplying the equipment for the military forces engaged in the war. The decisions of the Eastern Group Conference, which has recently concluded its sessions, and the efforts of

the Roger Mission are expected to have a beneficial effect on the economic and the industrial development of India and on the level of commodity prices. The revival of business confidence with improvement in the war situation and the modifications of the policy of price control followed by the Government are other factors which account for the partial recovery of prices. The gradual reduction of the stocks, as the last harvest is being sold out, has also had some influence in contributing to the upward trend. The expansion of Indian industries as also the efforts that are now being made for finding alternative markets for Indian staples point to the possibility of a further recovery of prices in the near future.

Price Control:

In this connection we may briefly review the price control measures and policy of the Central and Provincial Governments during the war period. On the 8th September, 1939, in exercise of the power conferred by the Defence of India Ordinance, the Central Government delegated to Provincial Governments its authority to control prices. The control of prices was limited to necessaries of life like food-stuffs, medical supplies, kerosene oil and cheap qualities of cotton cloth. The maximum price fixed for them was to be not less than 10 per cent above their price prevailing on September 1, 1939. Later in the same month the Central Government amended its original notification so as to provide for increases in the cost of production or landing costs in the case of imports in calculating the maximum price. The prices of imported commodities other than medical supplies, salt and kerosene oil could not be regulated except with the previous permission of the Government of India. Wisely enough price control was made applicable to prices at each of the stages of the wholesale and retail trade. Several Provincial Governments accordingly initiated price control measures on the lines prescribed in the Government of India's Notifications. Under a subsequent Notification dated 25th May, 1940, issued by the Government of India, which superseded earlier notifications, the basis of price control was made more elastic than under the earlier arrangement. The provision for fixing the maximum price at a figure not

less than 10 per cent above the ruling price at the same stage on 1st September, 1939, was deleted. This is a welcome modiification of the price control mechanism since pre-war prices can be a guide and a standard only for a limited period after the commencement of the war. The equity of price control is best secured by relating prices to costs and by providing that costs are determined by a careful scrutiny. The Provincial Governments were to exercise their power in accordance with such instructions as might be issued to them from time to time by the Government of India. Their power was limited to controlling prices at which the articles specified in the schedule might be sold in a market other than the primary wholesale markets. A further Notification issued on 19th June, 1940, empowered Provincial Governments to prohibit the withholding from sale either generally or to specified classes of persons goods kept for sale. Early in 1940 two officers were appointed by the Government of India to watch the influence of speculation on the prices, especially in future markets, of jute and cotton in Calcutta and Bombay respectively. Provincial Governments appointed special officers to administer price control measures.

For example, the Government of Bombay appointed a Controller of Prices for the City of Bombay early in December 1939. Later all the District Magistrates were appointed as Controllers of Prices for their districts and were instructed to publish for the information of the public fair price lists of wholesale and retail prices prevailing in the chief markets in their districts. The Controller of Prices, Bombay, has also been publishing such weekly fair price lists for Bombay City.

One of the measures adopted by the Government of Bombay to check profiteering by the retailers of grains was to start a number of Government grain shops in different parts of Bombay City. At these shops grain is being sold at fair prices, without any profit except for an addition to cover working expenses. An advance of Rs. 1,40,000 was sanctioned by the Government for this purpose. The increasing sales at these shops show that they serve a real need of the public. The prices charged at these shops, even where they do not make sales to sections of the public, serve as a

price guidance to the public and are a deterrent to profiteering.

Price Control Conferences:

The Central Government convened two Conferences of representatives of Provinces and States in October 1939 and January 1940 to examine the working of the price control measures so far adopted and to consider the line of future action. It was considered desirable to have a uniform administrative machinery in Provinces and States. It was agreed that if and when control of prices in the wholesale markets became necessary, this task should be assumed by the Government of India, whilst the task of controlling prices in the secondary markets and at the retail stage should be left to Provinces and States.

Pros and Cons of Price Control:

The price control policy of the Government has been the subject of a long controversy in the country. In favour of price control it may be said that its prompt introduction was necessary to check the wild wave of profiteering which ran through the country during the first week of September 1939 and which was not justified as stocks were normal and the transport facilities were working smoothly. An indiscriminate rise in prices throws the price mechanism out of gear, raises the cost of living, creates discontent, and upsets the whole structure of national economy. It is, therefore, necessary for the Government to regulate prices in public interest so as to maintain supplies and services essential to the life of the community.

Some of the objections to price control taken by the business community as represented by the Chambers of Commerce have been met by the amendments of the earlier Notifications noticed above. While the business community favour price control in order to check real profiteering, they do not think it desirable to control agricultural prices. It is argued that the Indian cultivator, who has suffered during the last decate from the depressed level of agricultural prices, should not be denied an opportunity of reaping a

just profit from his produce and of paying off his debts and improving his economic condition. The interests of the cultivators should not be subordinated to those of the vocal section of consumers who have reaped a benefit from the low cost of living during the last decade. Should the cost of living during the war rise, this class could legitimately ask for dearness allowances. It is essentially a case of securing defered justice to the cultivator. It is noteworthy that in France agricultural prices were exempted from control of prices. It has been further argued that while the war continues the rise in prices generally and of essential commodities in particular is inevitable. At any rate, so far as the exportable goods are concerned there cannot possibly be any justification for controlling prices of exports which are governed by the international price level. While no objection can be taken to price control in order to deal with profiteering, the latter must be carefully distinguished from legitimate profitearning, especially in the case of the large body of cultivators. It is only when a commodity is sold to consumers at a price which has no relation to its replacement cost that price control is desirable. Allowance must also be made for changes in demand and supply of the commodity in question since the outbreak of the war. The new Notifications issued by the Government of India may be said to go a long way in meeting these objections. Anyway, as prices have slumped heavily since last January and in the great majority of cases are finding their natural level, the necessity for strict price control has been considerably lessened. Our survey of the price trends in India during the last decade has shown that while there has been a limited price recovery from the depths of depression, it compares unfavourably with the price recovery in other countries. It is, therefore, very essential that a further healthy and ordered rise in the prices of important staple commodities, such as wheat, rice, raw jute, cotton, oilseeds, etc., should take place in order to raise the purchasing power and the earning capacity of the agriculturist. This may be said to be the central problem of Indian economy to-day. We fully endorse the opinion expressed by Dr. T. A. Gregory, Economic Adviser to the Government of India, that a rise in the

price of exportable produce should be welcome as it meant more spending power which will benefit industry and render easier the collection of taxes by the State. It is only when the rise is so great as to lead to social discontent that the interest of the cultivator must give way to the paramount interest of the State in the successful prosecution of the war. Judging from the remarks made by the Commerce Secretary to the Government of India on a Resolution in the Council of State in March last (to the effect that no action should be taken to arrest the normal rise in the prices of agricultural produce), it appears that there is a change in the attitude of the Government or at any rate hesitation to proceed with price control. It appears that it is not the policy of the Government to control prices of the agricultural produce at the primary stage until prices had gone up to a legitimate extent. So far the Government of India have not thought it necessary to put a stop to the rise in prices. It may be added that the general trend of opinion expressed at the two Price Control Conferences convened by the Government of India was in favour of leaving agricultural prices free to follow their natural course up to a point.

Effects of Fluctuations in Prices during the War Period:

We may now examine the effects produced by changes in the price level during the war period.

(i) *Agriculture*:—Following the sharp rise in the prices initiated by the war, high hopes were entertained regarding improvement in the prospects of the Indian agriculturist. It was thought that the cultivator would be able to wipe off his debts and make better profits after a prolonged and trying period of depression. It was hoped that the Co-operative Movement, which had been suffering from the incubus of heavy overdues would be relieved of that burden and would thus receive a welcome stimulus. Actually, the cultivator did not derive a substantial benefit even when prices were high during the first four months of the war as he had already parted with his produce. After the new harvested crops came into the market it was only for a few weeks that commodity prices ruled high enough to confer any

tangible benefit on the cultivators who did not wait for still higher prices. The subsequent slump in prices has adversely affected the purchasing power of the agriculturists and led to a deterioration of the economic conditions in the rural areas as shown by the reduced domestic demand for mill cloth. The limited revival of prices, which is in evidence during recent months, is to be greatly welcomed. At the same time the present agricultural situation is causing considerable anxiety owing to the accumulation of stocks of raw materials, like cotton, oilseeds, jute; and Government are being urged to take steps to deal with the problem of surplus stocks and of finding alternative markets for Indian agricultural staples in lieu of those closed during the war.

(ii) *Industries*:—The change brought about by the outbreak of war in the economic situation was also conspicuous in the sphere of Indian industry where the depression prevalent at the beginning of the year in such major industries as jute was virtually transformed into prosperity. The contraction of imports, the war orders of the Government and the general rise in prices were expected to stimulate industrialization of India and to ensure high industrial profits. Indeed, for a while, the stage seemed to be set for a widespread industrial boom. This was reflected in the rise of the index number of industrial securities from 98.5 in August 1939 to 130 in the last month of the year. While the war has undoubtedly given a stimulus to the industrial development of India, thanks to the war effort of the newly created war departments like the Supply Department, the earlier hopes were not destined to be fulfilled. The recession of prices, the decrease in the demand in the rural areas for industrial products, the difficulties regarding imports of machinery, essential stores and accessories, the increase in the cost of production (partly due to grant of dearness allowance to workers), the levy of the Excess Profits Tax and the difficulties of exporting manufactured goods from India, are some of the factors which have militated against rapid industrialization. Even the jute mill industry which has considerably benefited from the war demand, is not doing well as shown by the heavy fall in the prices of raw jute and jute manufactures and the curtailment of production. Apart

from the loss of some of the important export markets the initial heavy rise in the price of jute manufactures has stimulated the process of resort to substitutes like cotton bags especially in U. S. A. The production in the textile industry was actually less in the year 1939-40 than during the previous year. The plight of the sugar industry is well known. It is suffering from over-production and lack of export markets. The deterioration of the industrial situation is reflected in the decline of the index number of industrial shares from its peak of 130 in December 1939 to 109 in August 1940. In recent months a certain amount of industrial recovery has taken place. There has recently been increased consumption of home-grown cotton by the textile industry, which has received fresh Government orders for the Army in the Middle East. The new defence programme is responsible for the upward swing in the production of steel and pig-iron. The production of paper has also revealed a welcome increase.

There are indications of returning confidence. The growing war effort of India for her own defence and her importance as the central source of supply for the Empire, as also the assurance given by the Commerce Member that essential industries started during the war would be protected against unfair competition after the war, may be taken as pointers which revive hopes of expansion of industries and of upward trend of industrial prices and profits. This is to some extent indicated by the revival of prices of industrial products like jute and cotton manufactures and the steady undertone in the industrial share markets.

(c) *Cost of living*:—The rise in wholesale prices, especially during the earlier period of the war, has naturally affected retail prices and the cost of living, and this has created a demand for dearness allowances. A large number of industrial disputes occurred in the country on this account and dearness allowances have already been granted to workers in some industrial centres to neutralise the rise in the cost of living, which is shown by the increase in the Bombay Working Class Cost of Living Index Number (1934=100) from 106 in September 1939 to 114 in January 1940. The Index Number dropped to 110 in April. It

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rose thereafter to 114 in August, but came down by 2 points in September 1940. The rise in the cost of living has been checked to some extent by the price control measures already mentioned.

(d) *Trade*: (*i*) *External Trade*:—The outbreak of the war in Europe in September 1939 changed the Indian trade position. The export movement was accelerated, while imports declined owing to greatly enhanced insurance costs and difficulty in obtaining freight. The following table compares the foreign trade for the five months preceding and the seven months following the war with corresponding periods of 1938-39:

TABLE XIX

In Crores of Rupees.

	April to August			September to March		
	Imports.	Exports.	Balance of trade.	Imports.	Exports.	Balance of Trade.
1938-39	59.59	66.17	+6.56	92.21	103.06	+10.85
1939-40	70.10	77.13	+7.03	94.62	136.50	+41.88
Percentage charge.	17.6	16.6	6.8	2.6	32.4	28.0

The total foreign trade in merchandise during the year 1939-40 increased by 17·6 per cent to Rs. 178·34 crores, while the balance of trade recorded a rise of Rs. 48.90 crores. The total exports rose by 26 per cent from Rs. 169.35 crores to Rs. 213.62 crores mainly owing to increased demand for Indian produce and rise in prices that followed. The exports of Indian merchandise showed an increase under jute manufactures, raw jute, raw cotton, wool and tea. On the other hand, exports of grain, pulses, flour and oilseeds declined. The improvement in the exports was made up of a rise of about 20 per cent in the price level and 4 per cent in quantum. The total value of imports rose by 8·51 per cent to Rs. 164·72 crores. Most

of the items showed increases of which oils recorded the largest amount. On the other hand, imports of machinery of all kinds and iron and steel declined. The import prices increased by 6·4 per cent and the quantum by 2 per cent. Thus the figures showed that the cessation of trade with Germany was more than neutralized by the extension of trade elsewhere.

The figures of the Foreign Trade of India for the five months ending August 1940 show that the total exports of merchandise amounted to Rs. 82.51 crores as against Rs. 73.63 crores in the corresponding months of the previous year. The increase in the value of exports may be attributed partly to the increased offtake of the United Kingdom and partly to the higher level of prices. Total imports of merchandise during the first five months of the financial year 1940-41 amounted to Rs. 65.59 crores as compared with Rs. 74.52 crores in the corresponding period of the previous year. Exports during the five months ending August 1940 showed decreases under most of the items including cotton, tea, and raw jute. The only item to record a substantial increase was jute manufactures. Under imports most of the items showed increases of which oils recorded the largest amount. On the other hand, sugar, machinery, and cotton yarns and manufactures showed decreases. It is noteworthy that while exports of Indian merchandise in August 1940 were higher by Rs. 0·85 crore as compared with the previous month, they showed a decrease of Rs. 1.65 crores as compared with August 1939. Imports into India during August 1940 were Rs. 1.28 crores less than in July 1940 and Rs. 3.77 crores less than in August 1939. This shows the deterioration in the foreign trade position in August 1940 as compared with the corresponding month of the previous year, and illustrates the effects of the loss of the Continental markets.

(*ii*) *Inland Trade*:—The quantity of Inland Trade increased from 760 million maunds in 1938-39 to 808 million maunds in 1939-40, the highest since 1933-34. The improvement in the inland trade is also shown by the increase in the total gross earnings of State-owned railways from Rs. 94.36 crores to 97.96 crores, the highest since 1929-30,

and in the total number of wagons loaded from 72 lakhs to 75 lakhs, the largest recorded since 1928-29.

(e) *Public Finance*:—The reactions of price fluctuations on Public Finance duiing the war period may now be briefly indicated. The most obvious effect is the levy of the Excess Profits Tax on war profits accruing from the higher level of commodity and industrial prices and larger demand for certain articles for the prosecution of the war. The second is the increase in railway fares by 1 anna in the Rupee applicable to fares exceeding a rupee and in goods rates by 2 annas in the Rupee as from last March 1940. This was justified by the Government on the ground that there were big uncertainties of expenditure, and revenue, *e.g.*, the railways might be called upon to grant increased wages to their workers owing to rise in the cost of living and pay higher prices for coal and other materials. The rise in the price level and the brisk demand for their services offered them an opportunity of building up a reserve for absorbing the shock of diminished earnings, when the demand fell. The rise in prices also affected the cost of modernisation of the Army in India and generally the military expenditure apart from large direct increases in it. Besides the levy of Excess Profits Tax imposed to balance the Central Budget and the increase in Railway rates, the Central Budget for the year 1940-41 provided for an increase in the excise duty on sugar from Rs. 2 to Rs. 3 per cwt. and in the import duty on motor spirit from annas 10 to annas 12 per gallon. The Supplementary Budget introduced in November 1940 announced a surcharge of 25 per cent on Income-tax rates and increase in Postal rates. Sir Jeremy Raisman, the Finance Member, arguing in favour of additional tax increases during the course of his budget speech in March 1940, referred to the increase in the taxable capacity brought about by the war. The subsequent slump in prices has, however, weakened the force of this argument. Besides additional taxation, Defence loans were recently floated by the Government of India.

(f) *Currency, Exchange and Banking* (*i*) *Currency*:—The fluctuations in prices during the war have affected the currency and exchange position. The active average

circulation of notes increased from Rs. 196·14 crores in September 1939 to Rs. 250·47 crores in June 1940, the highest figure on record. It declined to Rs. 228·67 crores at the end of October 1940. The earlier increase was due to increased trade activity in India and rise in prices which followed the outbreak of the war. The subsequent decrease indicates the effects of the slump in prices and the recession of business. The total amount of currency absorbed in 1939-40 amounted to Rs. 59.53 crores as against a contraction of Rs. 9.62 crores in 1938-39. The addition was made up of an absorption of Rs. 10.08 crores of rupee coin and Rs. 49.45 crores notes respectively. This was the largest absorption of currency excepting the year 1918-19 when it amounted to Rs. 94.20 crores. We have already noticed the large withdrawal of rupee coin and its adverse effects on the price level in India.

(*ii*) *Exchange*:—The rupee-sterling exchange has remained steady owing to the increase in the value of exports and the larger trade balance and this has enabled the Reserve Bank greatly to extend the external assets of currency by large purchases of sterling securities against expansion of currency. On the other hand, measures of exchange control which have been introduced during the war, have had a certain degree of adverse reaction on exports and commodity prices.

(*iii*) *Banking*:—Although the immediate reactions of the war on money rates and bank deposits were somewhat adverse, the situation soon afterwards eased, especially after the reduction in the Bank of England rate from 4 per cent to 2 per cent. Money rates have tended to be easy following the expansion of note issue and rupee coin by the Reserve Bank of India against large purchases of sterling and considerable purchases of Treasury Bills. The Reserve Bank of India Rate has remained unchanged at 3 per cent. All this shows that unlike the last war, the present war has not had adverse effects on the money market. As a result of the war and the higher prices prevailing, the advances of scheduled banks increased from Rs. 109.71 crores in September 1939 to Rs. 153.77 crores in April 1940. They declined to Rs. 103.08 crores at the end of October 1940.

The increase in the Clearing House returns from Rs. 2,012 crores in 1938-39 to Rs. 2,308 crores in 1939-40 also illustrates the welcome effect of the war on Indian banking. The monthly Clearing House returns which reached their peak of Rs. 289.59 crores in December 1939 declined to Rs. 140 crores in July 1940 in consequence of the slump in prices and business activity.

Conclusions:

(i) *General*:—The foregoing survey of Indian price level trends during the last decade and their effects on the country's economy may now be brought to a close. In general, it may be said that the whole decade 1929-40 was a period of depressed prices for the agriculturists, barring short intervals, such as 1936-37, or again, the first four months of the present war period. The depressed state of the price level coupled with the disparity between agricultural and industrial prices has adversely affected the economy of an agricultural country like India, and has served to focus attention on some of its vulnerable features, such as her dependence on foreign markets for the sale of her agricultural staples and her predominantly agricultural character. Even before the war India's position as a competitor in the world markets had been seriously weakened. During the present war the loss of some export markets has further intensified the weakness. This clearly shows that sustained effort should be made to bring about increased consumption of raw materials in the country itself by stimulating industrialization. Pending the realization of these efforts, it is necessary for the Government fully to explore the possibilities of extending India's export trade with the Empire and non-Empire countries by entering into suitable trade agreements. It may also be added that the effects of the Eastern Group Conference and the Roger Mission should be mainly concentrated on the industrialization of the country so that a lasting benefit will accrue to India even after the war.

The predominantly agricultural character of her economy exposes India to grave risks of fluctuations of prices, especially in times of depression, which greatly affect the

fortunes of the Indian agriculturist who lives on the margin. While agriculturists all over the world are in a weak position to resist a fall of prices as compared to industrialists, the Indian agriculturist is peculiarly vulnerable in this respect.

The Government should pursue steadily a policy of improving the earning capacity and of keeping up the purchasing power of the agriculturist. To this end, measures such as the improvement of the machinery for marketing agricultural produce, relief of rural indebtedness, development of subsidiary industries, land improvement etc. may be steadily pursued. The advisability of fixing minimum harvest price should also be considered, as these are unduly depressed owing to the heavy selling pressure on the market. It is also necessary for Government to follow an elastic Land Revenue policy under which relief in proportion to fall of agricultural prices is given to the agriculturist. Legislation to ensure similar relief in respect of the rent of land is also necessary.

The discussion of the effects of fall of agricultural prices in India shows how it totally unsettles the entire economic life of the country and indicates the need for maintaining the purchasing power of the agriculturist. While we cannot insulate our economy and render it immune from external price disturbances, we should nevertheless strengthen it in various directions. This indicates the urgent need for a comprehensive scheme of economic planning for India.

It may be suggested that in so far as price fluctuations are inevitable, the Government should adopt a progressive policy of capital expenditure on public works like roads, canals, railways, housing, forest development, etc., during periods of economic depression, taking full advantage of the prevalent low money rates and floating funds in the money market by borrowing for such expenditure, which has a large scope, having regard to the undeveloped condition of the vast rural areas in the country. While such a policy has its financial and other limitations, it may be pointed out that so far it has not been properly explored as in other countries. It is also necessary that the Reserve Bank

should follow a monetary policy aiming at a suitable price level.

(ii) *Price Situation during the war*:—So far as the present situation caused by the slump in prices during the war period is concerned, a few suggestions may be offered. In the first place, the price control policy of the Government should be limited to controlling profiteering and care should be taken to see that it does not check the rise of agricultural prices. In the second place, the Government must speedily devise, in co-operation with the business community, a scheme for tackling the problem of the surplus stocks of agricultural staples which at present are exercising a depressing influence on prices.

It appears that Government is at present considering the problem of surplus agricultural production with special reference to jute, raw cotton, groundnuts, and wheat. It is thought that if the prices of these can be stabilised at a reasonable level, it is possible that other commodities may find their own level without any undue depression of the price. Crop-planning or crop-restriction schemes have been advocated, but it is by no means easy to enforce this remedy in the conditions of Indian agriculture. Voluntary guidance may, however, be to some extent useful.

We may suggest for the consideration of the Government purchases of agricultural staples by them, both on their own behalf as also on behalf of Great Britain, purchases of some of the Indian agricultural staples on the lines of recent purchases of Egyptian cotton by the British Government or of wool clip in New Zealand and South Africa by the same authority.

Government should make an effort to stimulate exports by giving, under certain conditions, financial aid to the export trade and may, in that connection, consider a scheme of exports credits organisation as in the United Kingdom.

A vigorous drive for finding alternative markets for Indian agricultural staples is essential, as also the immediate establishment of industries like the vegetable oil industry so as to ensure increased internal consumption of some of the industrial raw materials.

SYNOPSIS

In this Paper an attempt has been made to examine with the help of index numbers of prices variations in the level of commodity prices in India roughly during the last decade, i.e., from the first onslaught of the Great Depression in September 1929 to October 1940. The decade of prices has been divided into four main periods: (i) Depression period (September 1929 to March 1933); (ii) Recovery (partial) period (April 1933 to August 1937); (iii) Recession period (September 1937 to August 1939); and (iv) War period (September 1939 to October 1940 for which statistics are available). Each of the four price periods has been examined with reference to the general course of commodity prices in India, the variations in the prices of individual commodities, the relation between agricultural and industrial prices, and the comparative price movements in India and foreign countries. The causes of these price phenomena are analysed both with reference to world factors and special factors in operation in India. The effects produced by the changes in the price level on the different facets of the country's economic life relating to Agriculture, Industries, Trade—External and Internal—Public Finance, Currency, Exchange and Banking have been considered.

Except for a limited recovery of the price level before the recession of 1937-8 set in and the sudden spurt in prices during the first four months of the war, prices have generally remained depressed during the last decade. The principal conclusion reached as a result of the analysis of the price structure and price movements during the last decade is that Indian economy is particularly sensitive to a fall of prices owing to the predominantly agricultural character of the country and the disparity between the cyclical movements of agricultural and industrial prices. India's dependence on world markets for the disposal of her surplus agricultural production is responsible for the instability of her export trade, which periodically depresses the price level in India, following a drop in the prices of agricultural products in the world markets. This has very adverse reactions on the balance of trade, the maintenance of which, at a fairly high level, is essential for the liquidation of India's 'invisible' imports, and the stability of the Rupee ratio.

The first generation of Indian economists, like the late Mr. Justice Ranade, pointed out that the economics of an agricultural country like India are very unstable. This instability has come into marked prominence during the last decade owing to the depressed condition of commodity prices in general and agricultural prices in particular.

The purchasing power of the agriculturist, who is the backbone of the country, is the decisive factor which makes or mars the

economic fortunes of the country. A setback to his purchasing power acts as a depressing factor throughout the entire economic structure of the country. Economic policy in India has, therefore, to be so planned as firstly, to counteract the impact of a price fall on her agricultural economy and secondly, to establish an even balance between agriculture and industry, thus fortifying the country against cyclical forces operating on the price level in the world markets. Suggestions have been offered for achieving these objectives of economic policy. The hectic course of prices during the present war has been analysed, the special problems created by the slump in prices since January, 1940, after initial sharp upward trend, have been briefly discussed, and the line of possible approach to the solution of the problems indicated.

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PRICES IN INDIA BETWEEN THE TWO GREAT WARS

BY

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The world price level, including that of India, experienced phenomenal changes during the period after the War. The post-war boom was followed by a collapse in prices and the fall continued, though slowly, for some time till it gained a huge momentum during the period of the Great Depression. Slow recovery set in after 1933. This period thus affords a very interesting study of a price fall. The general characteristics and consequences of a fall in prices, *viz.*, the upheavals caused in the contractual relations entered into a number of ways in the process of production, consumption, exchange and distribution, the problems of adjustment of wages and the social and economic problems created, let alone the psychological effects and its repercussions on economic factors, are of profound importance.

In this superficial study we will mainly interest ourselves in the disparities in price structure rather than the general price movements. The comparison of price indices is obscured by the fact that the methods adopted in the selection of material, averaging and weighting are not uniform. They give a general vision of the trends, however. In the case of India, the Calcutta index is considered most reliable, though its variations are not the same as those of other indices.

The post-war period after the boom of 1920 showed a steady fall but a precipitate decrease took place from 1929. The Indian indices reached a lower point than those of most other countries; the percentage decline between peak 1929 and March 1933 was much higher in this country than in almost all others. The recovery from 1933 onwards has been slower in the case of India. Some of the price indices are given below:—

INDEX NUMBERS OF GENERAL LEVEL OF PRICES IN INDIA AND SOME FOREIGN COUNTRIES

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
	Index Number General Series (39 commodities 1873 = 100.	Prices in column I converted to base 1929 = 100.	Calcutta Index No. 72 commodities July 1914 = 100.	Calcutta price column III reduced to 1929 base = 100.	Bombay Index July 1914 = 100.	Bombay Index reduced to 1929 = 100.	United Kingdom (Board of Trade) reduced to 1929 base.	Canada (official).	U. S. A. (official).	Argentine (official).	Australia Melbourne (official).	Hungary (official).	Bulgaria.
								Reduced to base 1929 = 100					
1925	227	112	159	113	163	112	116·0	107	108·	115	102	115	
1926	216	106	148	105	149	102	108·5	104·6	104·9	103·7	101·6	102·5	85·5
1927	202	99·5	148	105	147	101·3	103·7	102·2	100·1	101·8	100·8	109·1	87·5
1928	201	99	145	103	146	100·7	102·8	100·8	101·5	102·2	99·4	111·6	93·9
1929	203	100	141	100	145	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
1930	171	84	116	82	126	87·0	87·5	90·6	90·7	95·6	88·5	79·3	80·9
1931	127	65·5	96	68	109	75	76·8	75·4	76·6	92·3	79·2	78·5	67·7
1932	126	62	91	64	109	75	74·9	69·8	68·0	92·8	78·3	76·0	60·1
1933	121	60	87	62	98	67·6	75·0	70·2	69·3	88·8	78·2	62·7	52·8
1934	119	59	89	63	95	65·5	77·1	74·9	78·7	102·3	81·6	65·3	54·3
1935	127	62·5	91	64	99	68·3	77·8	75·4	83·9	100·6	81·5	74·1	55·6
1936	125	61·5	91	64	96	66	82·7	78·0	84·8	102·9	85·6	73·6	57·7
1937	...	...	102	72	106	73	95·2	88·4	90·6	116·8	91·9	78·0	64·0
1938	...	...	95	68	101	70	88·8	82.2	82·5	...	92·2	...	...

WHOLESALE PRICE INDICES OF CERTAIN COUNTRIES
PRE-WAR BASE

Countries.	Peak in 1929.	Low point of depression.	March 1933.	Percent decline peak 1929 —March 1933.
Netherlands ...	147	72	72	51
Egypt ...	125	70	70	44
Italy ...	499	287	287	42
France ...	660	390	390	41
U. S. A. ...	138	86	86	38
Switzerland ...	143	90	90	37
Germany ...	140	91	91	35
Canada ...	154	99 (a)	101	34
United Kingdom ...	140	98	98	30
Australia ...	171	122	122	29
Sweden ...	145	105	105	28
Japan ...	172	111 (b)	134	22
India, July 1914 = 100.	145	82	82	44

Columns II and III are identical except in the case of Canada and Japan.

(a) February 1933 (b) June 1932.

When we examine the discrepancies in price structure and the economic disequilibrium caused thereby during the period of price fall, we find that a severer shock was received by this country. The main discrepancies may be classified as under:—

(1) Divergences between the prices of manufactured goods and raw materials.

(2) Divergences between the prices of agricultural and non-agricultural products.

(3) Divergences between the prices and cost of production, especially in agriculture—Divergences between prices received by the farmer and paid by him.

(4) Divergences between the wholesale prices, retail prices and cost of living.

(5) Divergences between export and import prices.

I. A divergence between the prices of manufactured goods and raw materials is inevitable due to a number of reasons. There is a greater elasticity of supply in the case of finished products than in that of raw materials. The manufacturers maintain large stocks of raw materials as a reserve and tend to decrease the demand in the concerned markets when the price fall commences, thus accelerating it further. It always takes some time for the change in the price of the raw materials to get reflected in that of the finished goods, since there exists a time interval between the purchase of the raw material and the sale of the finished product. Again, the high proportion of relatively inelastic items of costs in the case of manufactured goods, *viz.*, transport, capital charges, labour, taxes, etc., account for the slower movement in their prices. As one of the reports of the League of Nations says:—

"If therefore raw materials account for—for instance —one third of the total cost of manufacturing industry and all other costs remain constant, then a 30 per cent fall in raw material prices could ultimately cause only a 10 per cent fall in the prices of the final product."

A greater fall in raw material prices during the period is also attributed to the fact that these loom large in international trade and are faced with world competition to a greater extent than the products of manufacturing industries enjoying more or less a sheltered position. Moreover, the restriction of production, which was possible in the case of manufactures in contrast with the inability of the primary producers in this behalf raised unit costs of manufacture.

Again, the decrease in loans from creditor to debtor countries, the latter being mostly primary producers influenced the latter adversely.

Examining this disparity in the case of cotton and jute in India we find it increased particularly during the period of Great Depression, as is revealed by the following indices:—

DISCREPANCY IN THE PRICES OF RAW COTTON & JUTE & THEIR MANUFACTURES RESPECTIVELY

	Price indices of			Price indices of		
Year.	Raw Cotton.	Cotton manufactures.	Disparity.	Raw jute	Jute manufactures.	Disparity.
1928	110	99	90	105	123	117
1929	100	100	100	100	100	100
1930	62	87	140	66	72	109
1931	57	77	135	51	62	121
1932	63	74	117	47	61	129
1933	55	71	129	43	63	146
1934	50	72	144	41	63	154
1935	53	73	138	53	61	115
1936	61	69	113	53	52	98
1937	61	73	120	59	55	93
1938	46	66	143	51	51	100

Note:—Disparity is measured by dividing the price index of manufactured goods by the price index of raw materials.

It may be that the effect of protection on cotton manufactures was also responsible for the relative increase in their prices, but these indices indicate clearly that the Indian agriculturist had to sell the produce at a lower price and buy his requirements at a higher price and that a price fall affected his interests adversely from two sides. That the disparity should be greater in the case of jute, India's monopoly, is rather a sad commentary on the position of the jute producer with respect to the manufacturer.

II. A logical corollary of the divergence indicated above is the one pertaining to agricultural and non-agricultural products. Broadly speaking, agriculture is a mode of living rather than a mere source of livelihood. A farm cannot be so easily closed as a factory. The farmer feels constrained to allow a price fall to the point when the produce can be demanded under changed conditions. The rigidity of distributing costs has been illustrated by the U.S.A. Department of Agriculture, which is pathetically comic. During the depression the selling prices in cities of certain bulky farm products fell below the cost of transportation

and packing, so that the producer in the distant areas received not only no return but a bill for excess costs. The sensitiveness of agricultural prices is further increased by their being not only staples of international commerce but of speculative exchanges, which are themselves highly responsive to all changes in monetary and business conditions. Again, most of the agricultural products being raw materials, changes affecting finished products are immediately reflected on them.

The time interval which must elapse between the sowing of the crops and the price realization is also an important factor to be reckoned in a period of falling prices. The increase in the real burden of indebtedness, again, gives a sharper edge to the price fall.

With reference to the U.S.A. Prof. Thomsen has observed:—

"When prices change, the percentage rise or fall in farm prices nearly always is much greater than the percentage rise or fall in retail and wholesale prices . . . . If the farmer receives 30 cents of the consumers' dollar, a 10 p.c. reduction in the retail prices (10 cents), when taken from the farmer's 30 cents, represents a 33·3 per cent decline in farm prices." Thus he calculates that the whole burden of price fall (10 cents out of 100 cents) would be transferred to the producer.

After examining the available statistics in India (Bombay Labour Gazette food price index compared with general wholesale price index, export with import indices or the harvest prices with their quotations in wholesale markets) the disparity is established during both the periods of depression and upswing.

III. The discrepancies mentioned above lead us to the consideration of one of their fundamental causes, *viz.*, the divergence between prices and costs of production in agriculture during the post-war period. From a purely theoretical point of view it can be said that when relative price and costs do not harmonize in any line of production, it is indicative of maldistribution of the factors of production and justifies their redistribution. Since agriculture is much too irresponsive to all these inherent self-adjusting

forces, the discrepancy between costs and prices manifests itself. During the last Great War, there was a rise in the agricultural costs and prices, in several cases much to the advantage of the producer. The deflation of 1920-21 turned the balance against him. The great depression set in when the farmer was already feeling overwhelmed with the difficulties involved in the adjustment of costs to prices. This state of disequilibrium is clear from the statistics published by the League of Nations.

The position of the farmer as a purchaser and a seller is dependent not only upon the nature of the products and their demand but also upon general factors such as commercial, fiscal and monetary system of his country. Under free trade conditions he may be able to take advantage of lower prices on imported goods and may even be able to sell some of his products at a fairly reasonable price. On the other hand, those countries which produce agricultural commodities for a world market and at the same time consume manufactured commodities, enjoying protection, suffer from a disequilibrium in price level. During this period India could come in the latter category and thus suffered badly.

The statistical tables relating to farm accounts in the Punjab during the period of depression, compiled by the Board of Economic Inquiry, Punjab, clearly show that—

(*a*) The fall in prices and the comparative inelasticity of expenditure resulted in a considerable diminution of net income, making it negative in certain cases. The fall in prices in different commodities was not uniform.

(*b*) Even on the Risalewala Government farm, the net income in 1930-31 was reduced to one-quarter of what it was before the Great Depression and in 1934-35 it was only a half of that.

(*c*) Though before the depression the gross and net incomes per acre in canal-irrigated areas were higher than in the well-irrigated areas, the depression upset the balance in 1930-31.

(*d*) In farms cultivated on Batai system an unequal and heavier burden was imposed on the tenants by the fall in prices. The farm accounts for 1930-31 observe "The net income of the landlord was only about 44 per cent of the average net income of the previous four years; in the case of tenants it was only about 1/10th." Though the recent accounts indicate a general improvement all round and a closing up of the gap in favour of the tenant, a great leeway has to be made up yet.

(*e*) The distress caused to the agriculturist is indicated by the figures relating to cultivated lands, mortgaged and redeemed, the former showing an increase and the latter a decrease during the worst depression years.

The report of the Bengal enquiry on rural indebtedness (1935) referring to a number of families in 16 districts calculates that between 1928 and 1933 the income decreased by 48 per cent only, the average family surplus became a negative quantity and the average debt figure increased by 67 per cent.

All these examples indicate the detrimental effect of the "price scissors" to the agriculturist.

IV. Retail prices lagged behind wholesale prices. The index for the latter mainly includes competitively produced commodities, more susceptible to international influences, the speculative market or the monetary factors. It is also heavily weighted with semi-manufactured goods or war materials, whose prices fell heavily during the period of depression. The retail group, generally represented by C.O.L. index number is more comprehensive in scope covering a number of commodities and services including food, lighting, clothing, rent, conventional standard prices such as railway or tramway fares. Some of the charges are fixed or contracted for long periods of time and others vary very little not even with the volume of production; thus their incidence increases when sales fall off and decreases when business revives. The working of forces affecting these charges is

strictly limited in character and operation; they are national or rather regional, in contrast with others which are international in scope.

In the case of agriculture, the existence of middlemen minimises the gains of the producer and the consumer in a period of price rise or fall respectively. He charges consumers the cost of replacement of stock during a period of price rise and makes the producer bear the loss due to depreciation in the value of his stocks in hand, when beset with marketing difficulties. In India defective marketing organisation, the absence of storage facilities and the extraordinary position enjoyed by the middlemen clog the whole process of price mechanism. The divergence between wholesale and retail sale prices thus widened during this period, for instance, in the case of rice between 1929-30 and 1932-33 the wholesale price fell by 52 per cent and the retail by 48 per cent and in the case of wheat between 1929-30 and 1931-32 it was 61 per cent and 52 per cent respectively. The p. c. disparity between the wholesale prices and the cost of living has been worked out below. The disparity in the case of India is not very great as compared with other countries. It is probably due to the fact that the cost of living index is heavily weighted with commodities (food etc.), which fell in price considerably. Due to the poor standard of living of the people, manufactured goods cannot loom large in the C.O.L. index.

1929=100

Name of the Country.	1930	1931	1932	1933	1934	1935	1936
India ...	89·5	92·2	88·1	90·0	96·9	95·1	94·1
United Kingdom (Economist) price index ...	87·2	78·3	77·1	79·8	82·5	85	87·7
United States of America ...	94·3	87·8	87·4	92·5	99·1	101·6	100
Canada ...	91·2	84·0	85·7	90·4	95·2	95·2	96·5
Australia ...	93·5	93·4	97·0	99·9	102·5	100·7	103·5
Germany ...	94·4	91·4	89·8	88·8	91·2	92·7	93·9
Japan ...	96·4	93·2	97·2	101·6	98·5	100·9	102·4

.. This study of the divergence in export and import prices is still more interesting from the Indian point of view. As already indicated, the agricultural products fell more heavily in prices than the industrial ones. The agricultural countries suffered more than the industrial countries during the period of price fall. The heaviest fall in industrial countries occurred in the case of imported goods (mostly agricultural) and in agricultural countries in the case of exported goods (mostly agricultural). The disadvantages suffered by the former due to the fall in industrial production and employment were offset, at least to some extent, by the relative gain in the barter terms of trade. The following tables give export and import price indices and barter terms of trade for a few countries:—

IMPORT & EXPORT INDICES (IN NATIONAL CURRENCIES) & BARTER TERMS OF TRADE (IMPORTS=100)

Year.	BRITISH INDIA (in Rupees)			UNITED KINGDOM £ (B. O. TRADE)			GERMANY R. M.			U. S. A. Dollers			CANADA Can. dollars		
	Imp. price.	Exp. price	Barter terms of trade.	Imp. price.	Exp. price.	Barter terms of trade.	Imp. price.	Exp. price.	Barter terms of trade.	Imp. price.	Exp. price.	Barter terms of trade.	Imp. price.	Exp. price.	Barter terms of trade.
1927	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1928	96·4	97·5	101·1	101·6	99·8	98·2	101·8	100·0	98·2	96·8	102·3	105·7	98·4	96·3	97·9
1929	93·2	90·2	96·8	98·9	97·0	98·0	101·3	98·7	97·4	91·6	101·2	110·5	96·4	94·3	97·8
1930	80·0	71·5	89·4	86·8	90·5	104·3	87·9	92·9	105·7	74·7	90·7	121·4	85·7	79·1	92·3
1931	71·7	59·2	82·6	70·0	78·8	112·6	67·4	81·4	120·7	57·9	69·8	122·2	74·1	61·9	83·5
1932	65·2	55·3	84·8	64·8	73·4	113·3	50·2	70·7	140·8	45·3	59·3	130·9	72·2	56·1	77·7
1933	63·5	53·5	84·2	61·9	72·9	117·8	45·9	63·9	139·2	45·3	48·8	107·7	74·7	56·4	75·5
1934	63·0	54·1	85·9	64·0	74·5	116·4	46·2	61·2	132·5	52·6	43·7	83·1	78·3	62·0	79·2
1935	62·1	56·9	91·6	65·1	73·6	113·0	47·3	58·2	123·0	52·6	44·6	84·8	79·7	63·6	79·8
1936	62·8	57·2	91·1	68·5	75·8	110·6	49·9	58·9	118·0	56·8	45·3	79·7	81·3	68·2	83·9
1937	71·3	60·1	84·2	78·3	83·0	106·0	...	...	...	63·2	48·1	76·1	91·9	82·9	90·2

It is evident from the table that the terms of trade turned against India during this period, while they became more favourable in the case of Germany, the United Kingdom and the United States of America. In the case of Canada, an agricultural exporting country, they became more unfavourable. Thus, with the worsening of the terms of trade, the Indian national income diminished and the evil effects of price-fall got intensified. When recovery set in, the terms of trade began to improve in India, but the manufacturing countries began to lose the position of relative advantage which they had obtained during the depression at the cost of agricultural exporting countries.

How England gained from this disparity is clear from a survey of national expenditure in England by A. E. Feaveryear;—

"In a few cases the apparent increase of consumption may be partly accounted for by an increase of waste, which often occurs when prices fall. But the improvement in the average diet in the year of deepest depression as compared with the position seven years earlier is beyond doubt. The drawbacks of our dependence upon imported food are often pointed out; but in the past two years the much lower level of food prices compared with the prices of manufactured goods has been one of principal reasons of the comparatively happy position of this country. One wonders what might have happened in some of the depressed areas of Great Britain, had this cheap food been not available."

Conclusions.

The general level of prices in India, which was already on a downward move, experienced a precipitate fall, in the company of other countries, during the period of the Great Depression, and overtook most of them till the trough was reached.

The effects of this fall were made worse by the disequilibrium caused by divergences in other prices and costs. The prices of raw materials fell more than those of the manufactured goods, agricultural prices fell lower than non-agricultural, prices of products more than their costs, wholesale prices more than the retail ones, export prices

more than the import prices and prices of consumers goods more than those of producers goods.

All these factors conspired together to increase the burden on agriculture and broke the backbone of the agriculturist, already grown slender by the burden of social and economic institutions. The industrial exporting countries tried to ward off the onslaught by a reduction of production and benefited by the favourable barter terms of trade. But in India, these turned against her and added an additional burden to that of low agricultural prices and inelastic costs. There are however better signs of recovery, as those very factors which precipitated the attack got more active in their reverse movement. Let us hope that the Indian agriculturist will react well to the economic forces released by the upswing and the specific measures adopted for his amelioration.

PRICE LEVEL IN INDIA WITH PARTICULAR REFERENCE TO AGRICULTURAL PRICES

BY

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Of the various economic problems in the country the question of prices has received the least consideration. In India price records are maintained by the Provincial Governments—mostly prices of important agricultural prodce—and published in the Govt. Gazettes week by week. The Director of Statistics and Commerce, Government of India, publishes statistics about the value and quantity of articles of imports and exports. From these, prices of such commodities can be calculated. Agricultural prices in the provinces are collected by the juniormost members of the revenue staff as a matter of routine. Statistics by the Government of India are collected from the trade invoices. The present method of collecting price statistics has therefore been considered to be far from scientific. There is hardly ever any mention of the quality of gain for which prices are recorded. Mere mention of the price rates for agricultural produce like wheat, rice or cotton is meaningless without a fair detail about the specific quality. However, whatever statistics are available, they do point out the general trend of price level in the country.

It was really the serious situation created by the outbreak of the war which focussed public and government attention to the problem. In September-October, 1939, speculators and stockists raised commodity prices to unreasonable heights. In the hope of future gains, supplies were withheld from the market. Only inferior and adulterated qualities were available for the consumers. Profiteering was at its worst. As a result of this some of the marts in the U.P. were looted in broad day-light. The Government under the circumstances was compelled to take immediate action to restore confidence and normal trade activities. In the U.P. shopkeepers were ordered to bring out the hoarded stocks and not to sell below a particular rate. Price control thus came in as a necessary war measure. It

may again be noted that this price control was introduced by an administrative order simply to tide over the crisis and to remove the hardship to the consumers and was not adopted as a part of an economic policy of the Government. So far no effort seems to have been made to establish prices and to insure a steady income to the cultivators.

An examination of the price level in India for the last three decades points out three distinct periods of high, steadily declining and precipitately low prices. The period of the last war recorded the peak of rising prices. Then came the steady decline which ended with an abrupt fall of price level in the depression period. The new price level in an era of gradual but steady recovery had hardly become stable when the present war broke the trend and prices again rose violently. This rise in price is being stifled through price regulations and price fixation. The serious effect of the un-controlled fall in agricultural prices in India can be seen from the following table:

*Variations in the Prices of Agricultural Products in British India, 1928—38.**

(Prices in July 1914=100)

Year.	Cereals.	Pulses.	Oilseed.	Raw Jute.	Raw Cotton.	Hides & Skins.	All Products.	All Products (Base year 1928).
July 4914.	100	100	100	100	100	100	100	...
Annual Average.								
1928	133	159	142	100	167	134	139	100
1929	125	152	155	95	146	113	132	95
1930	120	119	127	63	91	87	101	73
1931	78	89	82	49	83	67	74	53
1932	68	92	76	45	92	50	70	50
1933	66	84	74	41	80	59	67	48
1934	69	84	94	39	73	51	68	49
1935	75	85	107	50	78	59	74	53
1936	79	77	101	50	89	70	78	56
1937	77	89	115	56	89	81	84	60
1938	72	88	106	57	67	64	77	55

* Indian Trade Journal, 14th Sep. 1939, p. 1449.

It is to be noted that in 1933, the general index number of prices for agricultural produce was only 67 compared to 1914 prices. If the prices immediately preceding the depression period, say in 1928, are taken as the base, the index numbers would show the real depth of the sudden fall in agricultural incomes. On the basis of prices alone, the fall in the income of the agriculturists was 5% in the first year, 27% in the second year, 47% in the third year, 50% in the fourth year and 52% in the fifth year. The period of recovery begins thereafter, and up to 1938, by very slow degrees, the recovery had reduced the loss of income to 45% from the maximum of 52% in 1933. The index number still was 55 compared to 1928. In terms of purchasing power it has meant a loss of over one hundred thousand millions of rupees to our agriculturists between 1928 and 1938. It was this loss of purchasing power for the four-fifths of the population which spread depression to other industries in the country. Even in the face of such widespread calamity price control (efforts to check a fall in prices) was not attempted. The effects of this depression and the weakening of the financial position of the people cannot be got over soon unless all efforts are directed towards raising the normal income of the agriculturists. What we actually find is the reverse of it. Instead of welcoming a rise in agricultural prices which would benefit the cultivator there is an attempt to check it through price fixation and price control.

There is no opposition to a price control which aims at checking pure speculative activities or which seeks to curb the tendency of profiteering on the part of stockists and the retailers. It is objected to only when it is one-sided, *i.e.*, it checks a genuine rise in prices and leaves them alone in a period of falling prices. From the national point of view a check to the fall in prices is more important than a control of rising prices.

Price regulation can be brought about only through two agencies, namely, the Government and the trade associations. The latter do it through a concerted action of the manufacturers by regulating the output. The jute industry. the coal industry and, now, the sugar industry provide

examples of such corporate efforts to control prices. In the case of our agricultural produce there are no such possibilities because our producers are unorganised, numerous, illiterate and diffused over a wide expanse. Further, price regulation through trade associations is open to suspicion. Their efforts may be directed to secure the maximum profits for themselves in utter disregard for other interests and classes. State therefore would be the best authority to regulate prices in the country. The Government should have a Price Control Board which should carefully look into the matter. Leaving other factors which affect prices, for instance, quantity of money in circulation, international trade conditions and the like, there is the permanent problem of low prices soon after the harvest which means serious loss to the income of the agriculturists. Subsequent rise in prices usually benefits the stockists and the big merchants. Another difficulty may be good harvests in certain years. This injures our agriculturists in reducing the prices though on other considerations it is quite a welcome thing. What is therefore needed is stability of prices between different parts of the year and in different years, of course, within the limits of normal fluctuations.

Several schemes of improvement and regulation of marketing methods through co-operative efforts or otherwise have been suggested and accepted by competent committees of inquiry. The Central Banking Inquiry Committee in 1931 recommended the establishment of godowns and co-operative marketing institutions to regulate supplies in the marts and thus stabilise price.

The U. P. Agricultural Debt Relief Committee (1938) also suggested the taking over of entire agricultural produce by some organisation for an even distribution throughout the year for removing great inequality between the harvest and subsequent prices. For want of finances these schemes could not be worked upon. This is the time to give effect to such recommendations. My special reason lies in taking advantage of the present situation. The last monetary crisis, absorption of silver rupees and such other tendencies point to the fact that the ordinary investor is unusually cautious in putting his money in banks or even in the form

of securities or Government currency notes. In one word, invisible investments are at a discount. Investible money is lying idle and people are really on the look-out for some sort of a safe investment. There are chances that money may be available against stocks of grain and commodities if suitable arrangements can be made to satisfy the investors about the safety of money. Investment in the form of buildings and immovable property is another thing which appeals and, therefore, much needed money may be taken for the construction of godowns and warehouses for stocking the produce at the harvest time. It may not be necessary even to collect money. Only if the Government or some other agency, which can command confidence, promises to rent these buildings for some time we can hope that people will bring out their hoarded or buried capital for investment. Further, the total amount of money needed would not be much. It would be limited to the margin of discount on such advances obtained through banking institutions. On a rough basis of 10% to 15% to the total cost of grain the entire surplus can be controlled and released in instalments according to market conditions. In a scheme like this even the Government should be interested for reasons more than one. It would increase agricultural income and bring about general prosperity. It may also help rapid industrialisation which the Provincial Government want to promote. Government revenue may be regularly collected. Lastly, taking war emergency into account, should a crisis develop again and there be a shortage of grain in the markets, these stores can relieve the tension and defeat the plan of the speculators and profiteers. From other considerations too, storing of surplus grain would be commendable.

The present world conflict has introduced another period of economic dislocation and uncertainty. The problem of prices is at the moment a serious one. In all schemes of price control, the interests of the agriculturists must in no case be subordinated to those of the more vocal elements of public opinion. He has suffered considerably during the period of depression and if he is compensated to same extent now, the relief is well deserved.

It is abundantly clear that the economic life of the

people is now so closely linked up with that of the rest of the world that the country must share the fortunes and reverses of other peoples, brought about by price fluctuations. It is neither desirable nor possible to isolate our economy from that of the world at large. We can, however, direct our efforts towards a properly insulated economic system (as distinguished from an isolated economy) which will guarantee the development of national interests with the minimum of conflict with other countries.

PUBLIC REVENUE AND EXPENDITURE IN THE UNITED PROVINCES 1921—41

BY

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The first reformed constitution which gave the Provinces some sort of responsible government came into being from 1st April, 1921, and the year 1921-22 was the first year when the budget of the U.P. Government, instead of being passed by the Finance Department of the Government of India, was framed by the Finance Department constituted in the province under the Reforms Act, and was voted item by item by the Provincial Legislature. The financial terms on which this province started its career were laid down by the Meston Committee, and were known as the Meston Settlement. According to this Settlement the province was to pay to the Central Government every year a contribution of Rs. 240 lakhs. The calculation of this contribution was based on the increase in the spending power of the province which the Committee estimated at Rs. 397 lakhs. The Committee hoped that the province would not only have easy financial condition in the years to come but would also enjoy a period of financial prosperity. This hope of the Committee was based on its estimate that normal revenue of the province would be Rs. 12·30 crores, its normal expenditure Rs. 10·75 crores, including Rs. 2·40 crores of the contribution to the Government, and its additional spending power Rs. 1·57 crores.

The defects of the Meston Settlement are too well known to need recapitulation here. It is sufficient to say that the above pious hope of the Committee never materialised. The period of Reforms opened with a gloomy financial outlook. In the very first year of the Reforms not only was the opening balance of nearly 89 lakhs used up, but the year ended with a net realised deficit of 59 lakhs. The actual revenue

for 1921-22, excluding the contribution of Rs. 2·4 crores was 10·015 crores and the expenditure Rs. 11·49 crores. The province thus started its career with utterly inadequate resources.

The first year was followed by four more years of deficits in succession, and by 1925-26 the total progressive deficit amounted to more than 3 crores. In 1926-27 the Province was, however, able to balance its budget, and in 1927-28 it made provision for a considerable surplus. This was rendered possible by the remission of the contribution of Rs. 2·40 crores. But this did not improve the financial situation for good. During 1927—41, it was only in four years, that is, 1929-30, 1932-33, 1935-36 and 1940-41, that the province could balance its budgets and make provision for some surplus. In the remaining nine years the province had to face big deficits. In short, out of twenty years of the period 1921—41, as many as fourteen years were years of deficits and only six years were those of surpluses. The total progressive deficits amounted to more than six crores and the total progressive surplus about two crores. In other words, in the last twenty years the provincial budgets showed a net progressive deficit of four crores. So, judged by the figures of the surpluses and deficits this province has been very unfortunate.

Provincial Contribution

This misfortune of the province is usually attributed to a number of factors. One of them is said to be the unfairly large contribution of Rs. 2·40 crores to the Central Government, with which the Provincial revenues were saddled from the very first year of the Reforms. The full contribution was realised every year up to and including 1924-25. In the year 1925-26 the province obtained a remission of Rs. 56 lakhs, which was raised to 89 lakhs in the following year, and was remitted altogether in 1927-28. The responsibility of such a heavy imposition for budget deficits in the first five years can hardly be denied. In the course of six years, that is, 1921—27, the province paid to the Central Government more than Rs. 13 crores by way of contribution, while its total progressive deficits in these years aggregated

to only a little more than Rs. 3 crores. So it goes without saying that even if the contribution of the province to the Central revenue had been less even by 25%, the province would not only have been able to balance its budgets, but would have also made provision for small surplus and thereby increased its balances. There is nothing wrong with the system of imposing contributions for helping the Central Government if they are properly calculated and are levied according to the capacity of the province to pay. The Meston Committee committed the blunder of calculating these contributions according to the increased spending power of the province without taking into account the intrinsic needs of the province and the possible increase in provincial expenditure due to new constitution. For this blunder of theirs the province had to pay dearly, as we have already seen above.

Full in Revenue

Another possible cause of the failure of the Government to balance their budgets is the falling off of revenue receipts during 1930—37. The remission of contributions to Central Revenue, no doubt, in 1927-28 brightened the financial prospects of the province, but only to be darkened again by the series of agricultural calamities which then ensued, culminating in the catastrophic fall in agricultural prices in 1930-31. The Meston Committee estimated the normal receipts of the province at 1230 lakhs. During 1921—26 the actual revenue receipts remained practically stationary round about 1264 lakhs. They began to improve from 1926-27, but locusts and monsoon failure in 1928-29 caused a shrinkage to Rs. 1145 lakhs and thus resulted in a budget deficit of more than Rs. 65 lakhs. Receipts reached their peak in 1929-30, when they stood at Rs. 1298½ lakhs, but only to witness a fall of over a crore the very next year. This was all due to economic depression and the consequent serious fall in agricultural prices. Continued low agricultural prices resulted in material shrinkage in revenue. During 1930—37 the revenue receipts could not dare touch the figure of even 12 crores, what to say of 12·30 crores, the normal revenue estimate of the Meston Committee.

In 1931-32 they fell as low as Rs. 11·22 crores. Even in the last year of the old Reforms, that is, 1936-37, they were as low as Rs. 11·94 crores, *i.e.*, Rs. 69½ lakhs less than the income in 1921-22.

On examining different sources of revenue we will find that land revenue bore the chief brunt of this fall. During 1930—37 it registered a fall of about Rs. 121 lakhs, that is, of 17·6%. In 1936-37 it amounted to Rs. 593 lakhs, i.e., Rs. 116 lakhs less than in 1921-22. The great fall in agricultural prices coupled with crop failures forced the Government to suspend not only settlement operations in 1932-33, but also the recovery of progressive enhancements due under the completed settlements. For the same reason Government had also to sanction heavy remissions in the fixed land revenue demand in addition to ordinary remissions in the fixed land revenue demand due to agricultural calamities. The remissions which are known as slump remissions amounted to 42½ lakhs in 1930-31, and remained at 112 lakhs annually from 1931-32 till the end of the period under review. This accounts for the fact that though the fixed land revenue demand was higher by 24 lakhs in 1936-37 than in 1921-22, the total receipts from land revenue in 1936-37 were Rs. 116 lakhs less than in 1921-22. Next comes stamp revenue which fell by Rs. 18·1 lakhs or 10% in the same period. This was followed by forest showing a fall of Rs. 17·5 lakhs or of 28·3%, registration Rs. 3·43 lakhs or 25%, interest on debts about Rs. 5 lakhs or 29%, and jails, health, justice, superannuation and miscellaneous Rs. 18·7 lakhs or 29%. Even in case of excise, which showed somewhat higher yield, the average amount of revenue in 1930—37 amounted to only Rs. 128·6 lakhs, *i.e.*, 66 lakhs less than the annual average yield of 1921—29.

Increase in Expenditure during 1921-37

But a still more important cause of the financial difficulties of the province was the increase in expenditure. The Meston Committee estimated the normal expenditure of the province at Rs. 10·75 crores, including the contribution of Rs. 2·40 crores to the Central revenue, or Rs. 8·35

crores, excluding the contribution. But in the very first year of the old Reforms, 1921-22, the actual expenditure amounted to Rs. 11·49 crores, excluding the contribution, or Rs. 3·14 crores more than the Meston estimate. As compared to 1920-21 there was an increase of Rs. 1·84 crores. The revision of pay of services and establishment alone cost Rs. 152 lakhs, and there was increase on all other heads of expenditure. In 1922—25, in order to balance the budgets substantial reductions were made, and consequently expenditure was brought down to Rs. 1070 lakhs in 1922-23, Rs. 1047 lakhs in 1923-24, and Rs. 1042 lakhs in 1924-25. But it again rose to Rs. 1117 lakhs in 1925-26, and then went on increasing till it reached its peak in 1930-31 when it stood at Rs. 1288 lakhs, *i.e.*, 453 lakhs more than the Meston estimate. In 1931-32 economic depression again led the Government to resort to retrenchment and other measures to reduce expenditure. Consequently it fell to Rs. 1184 lakhs and continued to diminish till 1933-34, when it was only Rs. 1127 lakhs. From 1934-35 it again began to march upward and in 1936-37 it stood at Rs. 1231 lakhs, that is, Rs. 82 lakhs more than the expenditure in 1921-22. Taking the whole period of 1930-37 we find that the average annual expenditure in this period was about Rs. 50 lakhs more than in 1921—29. In all the sixteen years of the old Reforms, 1921-22 to 1936-37, the average annual expenditure amounted to Rs. 1163 crores which means an excess of Rs. 3·28 crores over the Meston estimate.

Efforts of the Province to balance its budgets

The province did make desperate attempts to make both ends meet. At first it tried to meet deficits from the provincial balances and the funds obtained from the loan raised in the open market. The former were soon exhausted, and the use of loan funds to avoid deficits had also to be stopped as it was strongly objected to by the Government of India. The latter went so far as to warn the provincial Government that no loan would be sanctioned, whether raised in the open market or obtained through the Provincial Loan Fund, if its proceeds were applied in practice

for meeting the revenue deficits. The province then tried the only other two remedies, *i.e.*, retrenchment and additional taxation. The efforts at reduction of expenditure were somewhat forceful. In March 1923, Government appointed an Economy Committee with a non-official majority, and made substantial reduction in the budget of 1923-24. Retrenchment Committees were again appointed in 1931 and 1935 as a result of trade depression, and drastic reduction in expenditure was again carried out. The Secretary of State imposed ten per cent cut in salaries from December 1931. The cut resulted in a saving of Rs. 38 lakhs in a full year. As the result of these measures expenditure fell from Rs. 1288 lakhs in 1930-31 to Rs. 1184 lakhs in 1931-32, and was as low as Rs. 1127 lakhs in 1933-34, although half the cut in salaries was restored in that year. But from 1934-35 it again began to increase, and in 1936-37 it amounted to Rs. 1231 lakhs. The ineffectiveness of all these measures to reduce expenditure can be very well judged from the fact that in the whole period of economic depression from 1931-32 to 1936-37, the average annual expenditure, in spite of all cuts in salaries and retrenchments in this period, remained Rs. 15·6 lakhs more than in 1921—31, though the average annual revenue witnessed a fall of about Rs. 90 lakhs in the same period.

The failure of the Government to adjust the expenditure to the reduced revenue was due to the expansive nature of the Provincial expenditure. Items of expenditure, such as education, agriculture, industry, public health, pensions and superannuation and others are always expanding, and no amount of expenditure on them can be regarded as too great. The difficulty of reducing expenditure on such social and productive services can hardly be better illustrated than by the fact that during 1931—37, when the revenue receipts experienced a catastrophic fall, this expenditure amounted to Rs. 1081 per thousand of population representing 46% of the total revenue against Rs. 1082·1 per thousand of population, representing 39% of the total revenue during 1921—30, a period of comparative prosperity. The figure of Rs. 1081 per thousand of population really represents an increase over Rs. 1082 per thousand of population because

population in 1931—37 was about 42 lakhs more than in 1921—30.

As regards increase in revenue, efforts were made at new taxation, but they also proved spasmodic and sometimes abortive. The only additional taxation that the Government was able to impose was in the shape of an enhancement of general and court-fee stamp duties in 1923-24, 1924-25, 1932 and 1936, a tax on Motor Vehicles in 1923-24, and enhancement of irrigation rates in 1923-24 to an extent estimated to bring Rs. 22 lakhs. But even these few enhancements failed to yield the expected increase in revenue. For example, enhanced general and court-fee stamp duties in 1923-24 were expected to bring an increase of 65½ lakhs but they actually brought only Rs. 22 lakhs. Similar was the case with the enhancement of the duties in 1936. Again, enhanced irrigation rates were to bring Rs. 22 lakhs, but they only increased the revenue by about Rs. 7 lakhs.

This failure of the Government to bring about any substantial increase in revenue is attributed to a number of factors. One of them is the Debt Legislation. The latter caused fall in money and mortgage suits and execution of mortgage deeds, which in return resulted directly in the fall of stamp and court-fee receipts. A still more important cause of the difficulty of the Government in increasing revenue was the determined opposition of the Legislative Council to any attempt at further taxation. This opposition was maintly due to the fact that in the old Reform period about 80% of the Provincial taxation was being paid by the rural population, and as in the Council majority of members represented rural interests it was no wonder that every attempt at new taxation used to be met with determined opposition to avoid any serious increase in the burden of the agriculturist.

Inelasticity of Revenue Resources

But the most important or rather the main cause of the failure of the province in increasing its revenue resources is the inelasticity of the sources of revenue. The principal heads of revenue in this province yield receipts which are quite inadequate for its needs and are not capable of expan-

sion. Land revenue, which is the principal source of income, is a dwindling one. In 1923-24 it contributed 54·5% of the total revenue and now it is not even contributing 44% of the total revenue receipts. Moreover, it is a charge upon land which in most districts can only be varied at intervals of not less than thirty years. Hence it is incapable of arbitrary increase or reduction, and so as a tax it is thoroughly inelastic. Excise revenue which is obtained from the sale and manufacture of intoxicating liquors, hemp drugs, toddy and from the fees for their sale licences has also been either stationary or dwindling due to a restrictive policy of the Government and the increasing prejudice being manifested against the consumption of drugs and liquors. There is no hope of any marked increase in the yield of this tax, unless the duty is reduced, which would produce increased consumption, and consequently is outside the sphere of practical politics, because the policy of the Government has been and is still directed towards a reduction of consumption of intoxicants. Hence this tax can hardly be relied upon as an elastic source of revenue. Irrigation revenue, if regarded as a tax, is peculiarly inelastic. Its variation must be conditioned by economic causes over which Government has no control—increase in agricultural prices and the consequent value of the water to its purchaser. Moreover, the fact that as a tax it would fall entirely on the agriculturists practically precludes any enhancement. As regards court-fees, non-judicial stamp duties and registration, they are no doubt productive and elastic but their expansion also needs to be regulated so as not to increase the burden of taxation on the agricultural class. Taking also the tax revenue on the whole, it has proved not only incapable of expansion but also dwindling. During 1931—37 it amounted to Rs. 1-14-2 per head per annum on the average against Rs. 2-4-5 per head during 1926—31 and Rs. 2-5-9 per head per annum in 1921—26.

Financial condition in the new reform period (1937-38 to 1940-41)

This difficulty of inelasticity of revenue resources was to some extent solved under the new Reforms, which granted

the province some share in the taxes on income, export duties and excise duties, other than those specifically assigned to the Provinces, and also authorised the Provincial Government to impose a few more taxes, such as taxes on the sale of goods, agricultural income, entertainments and amusements, professions, trades, callings and employments and mineral rights. In view of these changes it was no wonder that with the inauguration of Provincial Autonomy from April 1, 1937, the financial condition of the province witnessed some improvement. In the four new Reforms years, *i.e.*, 1937—41, revenue receipts increased constantly and in 1940-41 they stood at Rs. 1358 lakhs, that is, Rs. 194 lakhs or nearly 10% more than the receipts in 1936-37. This increase was shared by both tax and non-tax revenues. The tax revenue increased from Rs. 1/14/1 per head in 1936-37 to Rs. 1/15/10 in 1940-41, and non-tax revenue increased from As. 8/8 per head to As. 11/8 per head in the same period.

Among the different sources of tax revenue, excise and stamps, instead of showing an increase, fell by about Rs. 29 lakhs or 11 pies per head and Rs. 17 lakhs or 7 pies per head respectively in 1937—41. The fall in excise can be explained by prohibition which was enforced by the Congress Government. Stamp revenue fell largely because of the Debt Legislation and certain other Rural Legislation enacted by the Congress Government which reduced rural litigation. This fall of Rs. 46 lakhs or 18 pies per head of population was, to some extent, made up by land revenue which increased by 44 lakhs or 13 pies in the same period. So, really speaking, the increase in tax was chiefly due to increase in other sources of revenue which the province was granted under the new Reforms. Share in the income-tax gave the Province Rs. 22·5 lakhs in 1938-39, Rs. 39·9 lakhs in 1939-40, and Rs. 41·7 lakhs in 1940-41. Receipts under Motor Vehicles Act, which were put on a provincial basis with enhanced rates from January 1937, amounted to Rs. 10 lakhs in 1937-38, Rs. 11·7 lakhs in 1938-39, Rs. 11·6 lakhs in 1939-40, and Rs. 11·6 lakhs in 1940-41, other taxes, such as Entertainment Tax, Petrol Tax and Sugar Cane Cess which were imposed by the Congress Government,

either for making up loss in revenue due to prohibition, or to carry out certain other social and economic reforms, contributed Rs. 3 lakhs in 1938-39, Rs. 45·2 lakhs in 1939-40, and Rs. 56 lakhs in 1940-41. These additional sources of revenue contributed in all Rs. 109 lakhs in 1940-41.

This contribution would have been greater by more than Rs. 102 lakhs, if the province had been allowed to impose employment tax in the manner in which it was passed by the Congress Government, and if the Neimeyer arrangement regarding the sharing of income-tax by the Province had not been altered and the Province had been allowed to enjoy substantial gains arising from increased railway and income-tax revenue. According to this alteration, for the next three years the Centre will retain Rs. 450 lakhs of the Province's 50% share of income-tax proceeds. This alone means an annual loss of Rs. 65½ lakhs to the Province.

Expansion of Expenditure

Along with revenue there has also been a considerable expansion of expenditure in these four years of the new Reforms. It reached its peak in 1939-40 when it stood at Rs. 1362 lakhs, that is, Rs. 131 lakhs and Rs. 231 lakhs more than the expenditure in 1936-37 and 1921-22, respectively. This increase was shared by practically all the important items of expenditure as the following figures will show:

TABLE No. 1

Expenditure per 1000 of population.

Year.	General Administration.	Jails and Police.	Law and Justice.	Education.	Medical and Health.
1932-87 (average)	268·4	396·2	141·3	394·2	106
1937-38	295·3	406·2	143·9	419·0	110·2
1938-39	287·9	394·3	139·8	420·4	122·8
1939-40	292·3	413·3	141·1	427·4	122·2
1940-41	287·4	423·7	143·7	439·3	122·9

The expenditure on productive services, such as irrigation, industries, agriculture, public works, cooperation, aviation and taqavi loans increased by Rs. 111·6 per thousand of population, or by 23·4% from 1936-37 to 1940-41, social expenditure, such as on education, health, medical, veterinary, pension, and superannuation increased by Rs. 74·4 per thousand of population or by 10 per cent, and primary expenditure, such as on general administration, jails, police, justice, direct heads and other departments by 46·6 per thousand of population or by 3·5% in the same period. The small increase in expenditure on primary services was mainly due to the increase in expenditure on direct heads, police, interest, sinking fund and debt charges. The natural result of this unequal increase in expenditure was that the percentage of revenue spent on productive and social services increased from 46·5% in 1936-37 to 52·2% in 1940-41, and that on primary or unproductive services diminished from 53·5% to 47·8% in the same period. This bright feature of the U. P. budgets in the new Reforms years was one of the achievements of the Congress Government, whose avowed policy was to minimise unproductive expenditure and maximise such expenditure as was calculated to enrich and elevate the economic and social life of the tax-paying population. They would have reduced the unproductive expenditure still more if the communal and labour troubles, which necessitated a lot of unproductive expenditure, had not broken out during 1938 and 1939, and if they had been permitted to adjust the salaries and allowances of I.C.S. and other services according to the paying capacity of the province.

Present Position

In spite of all these improvements in revenue and expenditure, the financial condition of the province is still far from being a happy one. Though revenue increased in all the years, yet the province could not balance its budgets in three out of four years of new Reforms. It is only this year that the province has been able to budget for an insignificant surplus of Rs. 22,000, and that too by merciless pruning of expenditure, by suspending constitution and thereby

saving some legislative expenses and by encouraging people to use more of intoxicants. Again, even in the present year, though the estimated revenue receipts are the highest, the revenue receipts per head of population are only Rs. 2-11-6 against Rs. 2-13-9 in 1929-30, Rs. 2-13-9 in 1928-29, Rs. 2-13-8 in 1927-28 and Rs. 2-12-3 in 1921-22. Besides this, they cannot be compared favourably with the revenue receipts in other provinces, as they are only Rs. 2712·7 per 1000 of population against Rs. 7049·5 of Bombay, Rs. 5079 of the Punjab, Rs. 3555·2 of Madras, Rs. 3168·2 of the Central Provinces and Rs. 2735·8 of Bengal.

Similar is the case with the expenditure. Though it has expanded by about 17% in the course of these twenty years, yet it is still low. Among the six major provinces this province stands second in point of population, but as in case of revenue so in case of expenditure per thousand of population, it stands lowest. The following figures bear out this fact:

TABLE No. 2

Public Expenditure in 1940-41

Province.	Expenditure per 1000 of population.		Total expenditure per 1000 of population.	Population (in lakhs).
	Productive and beneficial services.	Primary services.		
Bombay ...	3448·7	3600·2	7048·9	182
Punjab ...	3166·8	1850	5006·8	240
Madras ...	1884·5	1666·4	3250·9	472
Cenral Provinces	1469·2	1692·5	3161·7	153
Bengal ...	1403·0	1442·8	2845·8	511
United Provinces	1369·2	1348·5	2717·7	496

The public health expenditure of the province amounts to only 26·4% of Bombay, 30·60% of the Punjab, 44·8% of Madras and 81·7% of the Central Provinces. The same is the case with the expenditure on education. The latter is hardly 40% of Bombay's expenditure on education, 77% of Madras and 64% of the Punjab. All these facts do not need any more comment. They are speaking for themselves. The inadequacy of public expenditure and revenue in the United Provinces is too obvious to need any more proof. The insufficiency of revenue and expenditure has been resulting not only in the starvation of beneficent services and increasing administrative arrears, but also in increasing uninterruptedly the provincial debt from Rs. 1516 lakhs in 1921-22 to Rs. 3281 lakhs in 1936-37. The province is doomed to bankruptcy if no substantial improvement is made in its financial position. There are but two ways of affecting such an improvement, *viz.*, reduction and adjustment of expenditure among different services and increase of revenue receipts. The province should try both.

Possibility of Reducing Expenditure

As regards reduction of expenditure, one can hardly doubt that there is still sufficient scope for it, especially in civil administration. The salaries and the allowances that are being paid to civil officers and civil servants are too high in view of the poverty and low taxable capacity of the province. The province can hardly afford to pay Rs. 48000 to 60000 annually to its Chief Secretary, Rs. 48000 a year to each of its High Court Judges and Rs. 12000 to Rs. 18000 to each District Magistrate. In 1936-37 it was estimated that about 50% of the Provincial expenditure was being absorbed by salaries, pensions, travelling and other allowances, and if this is the case even now, a cut of only fifteen per cent in these heads of expenditure will save the province nearly Rs. 100 lakhs per annum, which, if spent on productive and social services, would increase the percentage of productive expenditure and reduce unproductive expenditure. The latter, in spite of the best efforts of the Congress Government, is still amounting to 50% of the total expenditure against 49% in Bengal, 47% in Madras and only 37% in the

Punjab. The increased expenditure on beneficial services would improve not only the economic and social life of the people but also their revenue-paying capacity. The well-known principle of the farmer that constant cropping without manuring ends in the exhaustion of the soil should also be observed in the economy of the province.

Scope for increasing revenue

As regards the increase in revenue, there is still sufficient scope as the incidence of both tax and non-tax revenues in the United Provinces is still the lowest among the major provinces. This is quite obvious from the following figures:

TABLE No. 3

Tax and non-tax revenue per head of Population in 1940-41

	Total Revenue.			Tax Revenue.			Non-tax Revenue.			Land Revenue.			Excise.		Stamp.		Other taxes.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	As.	p.	As.	p.	Rs.	a.	p.
Bombay	7	0	9	5	3	9	1	13	0	1	12	7	13	9	11	8	1	15	9
Central Provinces	3	2	8	2	12	4	0	6	4	1	4	3	6	1	5	7	0	12	5
Madras	3	8	11	2	11	5	0	13	6	1	0	11	10	11	5	8	0	9	11
Bengal	2	11	9	2	4	2	0	7	7	0	11	6	4	1	8	3	0	12	4
Punjab	5	1	7	2	0	5	3	1	2	1	1	4	7	9	5	1	0	2	3
U. P.	2	11	6	1	15	10	0	11	8	1	3	4	4	4	4	4	0	3	10

Moreover, in the last twenty years, though the incidence of non-tax revenue has been increasing somewhat, yet the incidence of the tax revenue has been constantly falling as the following figures show:

TABLE NO. 4

Tax revenue per head of Population

Years.	Land Revenue.			Excise.		Stamp.		Other taxes.		Total.			Non-tax Revenue per head of population.	
	Rs.	a.	p.	As.	p.	As.	p.	As.	p.	Rs.	a.	p.	As.	p.
1921-22 to 1923-26	1	7	11	4	10	5	11	3	1	2	5	9	6	5
1926-27 to 1930-31	1	7	5	4	6	6	1	2	5	2	4	5	7	6
1931-32 to 1935-36	1	3	0.2	4	1	5	5	1	11	1	14	5·2	6	6
1936-37 to 1940-41	1	2	11.6	4	8	4	10	2	7	1	15	0·6	10	2

From the above figures it is quite obvious that it is possible to increase the revenue from even the present sources by revising the rates. Besides this, the province must tap some new sources of revenue. There are many sources of tax revenue, such as tax on agricultural income, tax on succession, tax on advertisement, tobacco and betel tax, registration of marriages, excise duty on aerated water and patent medicines, which the province is authorised to utilize but has not cared to explore their potentialities, and which are still awaiting their fair trial to prove themselves productive and economical. Now the province must no longer ignore them as unproductive and costly without giving them due trial. There is every hope of their being proved otherwise. As regards the opposition of legislature, this would also melt away if the Government would assure them that the receipts of these taxes would not be squandered on unproductive purposes, but would be utilized to render some productive and social services to better the social and economic life of the people.

THE FINANCES OF INDIAN STATES*

BY

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General

The Indian States cover two-fifths of the area and are responsible for one-fifth of the population of India. Therefore it would not be fair to exclude such a large part of this country when dealing with our public finances. The more important of these States have regular annual budgets, and in many of them budgets have to be discussed and passed by the Legislative Council. Unfortunately financial statistics of some of these States are difficult to get, and as each State has its own peculiarities of computation and compilation, a proper comparison is not easy. Financial statistics of most of the States (and in the case of the leading States, for a series of years) will be found in my book, *Growth of Federal Finance in India.* In the present paper, it is my purpose to compare the revenue and expenditure in some of the leading States. The States taken for comparison are (arranged according to the amount of revenue):—Hyderabad, Mysore, Travancore, Jammu & Kashmir, Baroda, Indore, Cochin and Bikanir. Between them these States have a total population of 35 millions (43% of the total population of the States) and a total revenue of Rs. 22·73 crores (41% of total).

Certain preliminary points must be borne in mind in comparing the finances of these States.

1. The financial statistics of all the States are for the latest available year, namely, 1938-39. In the case of some States (Mysore, Travancore, and Cochin) the completed

* I am indebted to the Durbars of the States included in this survey, for kindly supplying me with copies of their latest budget statements.

accounts ('actuals') are available, but in the case of other States, the 'actuals' for that year are not yet available, and therefore revised estimates have been taken. As the revised estimates do not usually differ much from the 'actuals,' there may not be any great weakness in this comparison.

2. For most States, the currency used is the British India Rupee, but in the case of Hyderabad, the Osmania Sicca Rupee is used (one O. S. Re. = 13 annas). The Sirkar Rupee of Travancore is 15 annas 9 pies.

3. In order to bring the revenue and expenditure under different heads comparable as between the various States, it was necessary to make certain adjustments here and there. Two such adjustments call for notice—

(a) All the States do not follow the same method of compiling figures of revenue and expenditure. In the case of some States (Mysore, Travancore, Baroda, etc.), the revenue under commercial services is given net; that is, the working expenses of railways, irrigation works, mines, etc., are deducted from the gross income and the net figures are entered in the budget statement. Certain other States give the gross figures under revenue and enter the working expenses under expenditure. This mode of computation has no advantage except that it inflates the budget totals and this is no real advantage.

(b) Certain States like Hyderabad bring under one consolidated item (Palace Account) all the expenditure connected with the Ruling Family, but in the case of others, some items which ought to come under "Palace" are scattered about under General Administration Account and P.W.D. Account. The expenses of the water supply and the maintenance of telephone in the Rulers' Palace have to be added to the Palace Account. Similarly, the allowances to other members of the Royal Family and expenses connected with them have also to be placed in the same account. Mysore, for instance, includes this latter item in the Palace Account, but certain other States (*e.g.*, Travancore) place this in the Political Account. Justification can be found for both modes of classification, but as we need a uniform basis for purposes of comparison, this item is here included in the Palace Account.

The revenue expenditure of the States are given in the tables in the next pages.

Revenues of the States

Land Revenue.—In most States, land revenue is the mainstay of the State fisc and is responsible for about a third of the total revenue (Hyderabad 36%, Baroda 36%, Indore 49%). The corresponding percentages in British Provinces are: Madras 30%, Bombay 27%, Bengal 25%. Land revenue plays a smaller part in the maritime States (Travancore 13·7%, Cochin 12%). The land revenue systems of the various States differ; but it may be said in a general way that the ryotwari tenure prevails over the bulk of the area in Hyderabad, Mysore, Travancore and Cochin. The burden of land revenue per head of population and per square mile is given below. For purposes of comparison, figures for the Provinces of Madras, Bombay and Bengal are also given.

Incidence of Land Revenue

	Per square mile.			Per head of population.		
	Rs.	as.	ps.	Rs.	as.	ps.
Hyderabad ...	378	6	5	1	12	0
Mysore ...	396	0	0	1	12	6
Travancore ...	458	9	7	0	11	0
Baroda ...	1004	0	0	3	5	11
Jammu & Kashmir ...	75	8	6	1	12	0
Cochin ...	808	1	7	1	0	0
Indore ...	597	1	7	4	8	0
Bikanir ...	364	12	10	0	15	0
Madras ...	342	8	0	1	1	6
Bombay ...	439	11	2	1	13	9
Bengal ...	384	8	0	0	10	0

It is clear that the burden of land revenue per head of population is highest in Indore and lowest in Travancore. A proper comparison is possible only by taking the rates of

assessment in the dry and wet areas, but such a detailed comparison is not within the scope of this paper.

Customs.—In full-fledged Federations, customs duties are a Federal head of revenue. In India, the States have so far been separate entities and maritime States like Travancore, Cochin, the principal Kathiawar States, and the inland States of Hyderabad and Kashmir raise part of their revenue by customs, amounting to a total of Rs. 4·5 crores. Mysore too had a large revenue formerly under inland customs, but this was abolished in 1865. Thus the maritime States of Travancore and Cochin obtain 19·2% and 26·6% respectively of their revenue from customs; Kashmir, an inland State, obtains 28·3% of its revenue from this source. The Kathiawar States depend even more on customs revenues and have profited greatly by the enhancement of the customs tariff of British India.

Income-tax.—This item has not so far made its appearance in some of the States (Hyderabad, Indore, Bikanir), and even in some of the States where it is levied, the rates are rather low. Therefore, income-tax brings in only small proportions of the total revenue. The justification given for this is that nearly all the States are predominantly agricultural; but seeing that the revenue burdens of most States to-day are regressive, it is perhaps time that most States imposed an income-tax on a fairly high scale. An income-tax on agricultural incomes is also justified, because in many States certain large landed interests are now free from tax-burdens. The incidence of income-tax in the various States and in British India can be seen from the following table:

		Incidence of Income-tax per head of population.		
		Rs.	as.	p.
Mysore	...	0	6	11
Travancore	...	0	3	3
Baroda	...	0	4	1
Jammu & Kashmir	...	0	1	2
Cochin	...	0	10	5
British India	...	0	9	8

Is this the reason why capital has lately been flowing from British India to certain States?

Political Receipts and Tributes.—These are payments by certain principalities within each State. They are somewhat analogous to the peiscush paid by Zamindars in British India.

Commercial Services.—A noteworthy feature of the States' fisc is that some States obtain a growing revenue from commercial services. In the case of Mysore and Bikanir, the percentage of revenue derived from these sources is 25·5% and 39·5% respectively. Mysore obtains its revenue chiefly from hydro-electric works (11·7% of the total revenue) and railways (6%). Bikanir's revenue under this head comes from railways (22%) and irrigation works. Hyderabad and Baroda also obtain large revenues from railways (13·9% and 7·7% respectively). In this respect, the States are considerably better off than some of the Provinces of British India, whose revenue from commercial services is still undeveloped. Madras and the Punjab obtain considerable revenue from irrigation works and they will soon add to it a comfortable net return from hydro-electric works also. But States like Mysore are far ahead of them and it will take long for the Provinces to catch up, unless they follow a more active economic policy.

Expenditure of the States

Direct Demands on Revenue.—The percentage of total revenue spent on this item ranges between 10·8% (in Cochin) to 16·3% (in Hyderabad). Among the Provinces, Madras spends 12%, Bombay 13% on the cost of collection.

General Administration.—This includes the cost of administrative services, police and jails, judiciary, political charges, religion, the guest house, etc. While Hyderabad and Mysore spend 21% and 20% respectively of their revenue on this head, Indore spends 32·5%, Jammu and Kashmir 30·8% and Travancore 29·5%. Religion is an important item of expenditure among certain States. Hyderabad spends Rs. 14·3 lakhs (1·6% of total revenue) on this item; Travancore spends Rs. 22·4 lakhs (9%). The expenditure in Travancore includes a contribution of Rs. 16

lakhs to the (Temples) Devaswoms. It is fair to add that this contribution is made on account of the extensive temple properties which are in the hands of the State. Those who hold that States should have nothing to do with religion will of course inveigh against such expenditure, but we need not discuss such issues here. The expenditure on guests is another notable item under this head. Some States do not specify such expenditure in their budgets. Mysore, one of the most hospitable States in India, spends Rs. 3,92,777 on guests.

The Palace.—The civil list of the Ruler and the allowances to other members of the Ruling Family form the most important item in all State Budgets. The proportion borne by this item to the total revenue is highest in Bikanir (23%) and lowest in Hyderabad (6·6%). The civil list proper is Rs. 50 lakhs in Hyderabad, Rs. 23 lakhs in Mysore, Rs. 12½ lakhs in Travancore, Rs. 26 lakhs in Baroda, Rs. 21 lakhs in Kashmir, Rs. 7½ lakhs in Cochin, Rs. 11 lakhs in Indore and Rs. 15·3 lakhs in Bikanir.

Debt charges.—This item depends on the extent of capital development in each State. The expenditure under this head is highest in Mysore (19%). That State has carried out a very active economic policy during the last twenty years, and this debt represents a large addition to the wealth of the State. Such debt is not like the deadweight debt of the European countries; it is the basis for economic progress.

Education.—Of the nation-building services, education comes first, as it is the most pivotal of them all. The leading Indian States spend large proportions of their revenue on education. Travancore spends 19·7%, Cochin 19·5% and Baroda 17%. The *per capita* expenditure is highest in Baroda and Cochin. Some of the Northern States spend smaller proportions of their revenue on education. In this respect, States like Travancore, Cochin and Baroda are much in advance of the provinces, as the following table will show:—

Education.

	Percentage of total expenditure.	Per head of population.		
		Rs.	As.	Ps.
Madras ...	16·23	0	9	5
Bombay ...	14·73	1	1	0
Bengal ...	12·06	0	4	11
Hyderabad ...	10·6	0	10	11
Mysore ...	13·41	0	13	2
Travancore ...	19·75	0	15	10
Baroda ...	17·08	1	9	1
Jammu & Kashmir ...	9·05	0	9	1
Cochin ...	19·52	1	8	10
Indore ...	8·16	0	11	10
Bikanir ...	5·96	0	6	9

It would be interesting to know how the education budget is spent. The details under this head are not given for Hyderabad. In the Mysore budget, the university accounts form a fifth, and in Travancore a seventh of the education expenditure. Quite rightly, primary education absorbs the bulk of the expenditure under education, nearly half in Mysore, and slightly more in Travancore and Baroda. The Baroda budget is notable for its generous expenditure (Rs. 2 lakhs out of 38 lakhs) on technical schools. The expenditure on this item in the other States is much smaller. More than half the education grant in Travancore goes to 'vernacular' schools and this is responsible for the remarkable progress of literacy and the reading habit in that State.

Public Health.—The highest percentage spent on public health is in Cochin (7·6%) and the lowest is in Indore. Some of the Indian States are better equipped with hospitals and dispensaries than the Provinces of British India.

Agriculture, Co-operation, Industries.—The percentage spent on agriculture is highest in Cochin (3·7%), Mysore coming very near (3·2%). The percentage spent on industries is also highest in Cochin (6·1%), although for

the matter of industrial development Mysore takes the palm.

Public Works.—Hyderabad leads in this respect with the highest percentage spent on public works (19%). Baroda (14%), Cochin (13%) and Travancore (12%) are also conspicuous for their liberal expenditure on public works.

Backward Classes.—Some of the States (*e.g.*, Travancore and Cochin) give special attention to the elevation of the depressed classes by keeping schools for them, providing agricultural facilities, and so forth.

Security and Developmental Services.—Perhaps a suitable method of assessing the expenditure on social and economic services in each State is to compare the proportions allotted in the States' budgets to the developmental functions of Government as distinct from security functions. The developmental functions taken in this connection are education, public health, medical aid, agriculture, co-operation, industries, public works, State charities, etc. The results of such an analysis are given below:

Expenditure on Developmental Services.

Province or State.	Percentage to total expenditure.	Expenditure per head of population.			Expenditure per square mile.		
		Rs.	As.	Ps.	Rs.	As.	Ps
Hyderabad ...	35·68	2	4	11	403	0	0
Mysore ...	32·64	2	0	1	448	0	0
Travancore ...	39·56	1	15	9	1325	0	0
Baroda ...	38·96	3	9	2	1069	0	0
Jammu & Kashmir	23·43	1	4	11	56	8	4
Cochin	47·09	3	11	6	3030	0	0
Indore ...	28·30	4	14	2	3400	0	0
Bikanir ...	23·83	1	10	11	65	1	7
Madras ...	38·24	1	6	3	435	13	2
Bombay ...	33·10	2	3	0	563	2	11
Bengal ...	34·03	0	13	10	530	6	6

It is clear from the table above that many States spend on developmental services larger percentages of their revenue than the Provinces, and this is all the more creditable, seeing that the States have to discharge certain functions which in British India are allotted to the Central Government.

Conclusion

On the whole, therefore, some of the States are in many ways ahead of British India. But the position is not so favourable in many other States. In several of them the tax system is highly regressive and efforts are urgently needed to remove this defect. They must also engage themselves more actively in supplying commercial services—railway transport, irrigation, electricity, etc. Thereby, not only will they add to their revenues; they will also be laying the foundations of a stable economic prosperity.*

* My thanks are due to Mr. N. K. Thomas, Research student for collecting much of the statistics utilised in this paper.

TABLE 1. REVENUE OF CERTAIN INDIAN STATES, 1938-39

Items.	Hyderabad (S. R.)	Mysore	Travancore (S. R.)	Baroda	Jammu & Kashmir	Cochin	Indore	Bikaner
Land Revenue	3,13,00,000	1,16,09,104	34 98 714	82,00,000	63,86,000	11,96,592	59,17,000	8,83,000
	36·34	29·30	13·78	36·32	27·51	12·38	49·31	10·03
2 Customs	1,10,00 000	Nil.	48,73,397	16,50,000	65,74,000	25,27,877	15,25,000	17,50,000
	12·77		19·20	7·31	28·32	26·62	21·71	19·88
3 Income-tax	Nil.	28,20,065	10,40,295	6,20,000	2,86,000	7,81,810	Nil.	Nil.
		7·12	4·10	2·75	1·32	8·09		
Excise	2,16,00,000	66,01,789	73,68,241	34,63,000	3,24,000	20, 93,655	12,70,000	12,13,500
	25·08	16·66	29·03	15·22	1·40	21·67	10·58	13·78
5 Stamps	20,00,000	18,30,551	20,13,474	10,45,000	6,71,000	5,47,433	6,50,000	85,700
	2·32	4·62	7·93	4·63	2·89	5·67	5·42	0·97
6 Registration	3,30,000	3,04,563	4,55,088	1,75,000	Nil.	1,21,290	92,000	11,400
	0·38	0·77	1·77	0 78		1·26	0·08	0·13
7 Forests	14,40,000	26,24,809	14,97,332	3,70,000	50,31,000	4,12,036	4,85,000	6,000
	1·67	6·62	5·90	1·64	21·67	4·26	4·04	0·07
8 Interest	31,89,000	19,71,936	18,47,025	27,25,000	3,66,000	2,50,828	6,00,000	20,500
	3·70	4·98	7·28	12·07	1·58	2·60	5·00	0·23
9 General Administration.	22,43,200	17,26,933	26,48,006	15,15,400	30,06,000	10,5[illegible],93	7,15,000	13,48,410
	2·60	4·36	10·43	6·71	12·95	19·95	5·96	15·32
10 Political Receipts & Tributes.	29,16,667	Nil.	Nil.	6,25,000	Nil.	6,857	2,31,000	Nil.
	3·39			2·77		0·08	1·93	
11 Commercial Services (net).	1,01,09,300	1,01,32,340	1,40,678	21,86,000	5,71,000	6,65,537	5,15,000	34,84,724
	11·74	25·57	0·55	9·68	2·46	6·89	4·29	39·58
(a) Railways	1,20,33,300	25,27,460	39,794	17,55,000	55,000	4,85,825	Nil.	19,80,000
	13·97	6·38		7·74	0·02	5·03		22·49
(b) Electricity	1,11,300	46,68,900	Nil,	3,00,000	2,20 000	Nil.	5,00,000	Nil.
	0·13	11·78		1·33	0·95		4·17	
Total ...	8,61,28,167	3,96,22,090	2,53,82,250	2,25,74,400	2,32,15,000	96,62,408	1,20,00,000	88,03,234

TABLE 2. EXPENDITURE OF CERTAIN INDIAN STATES, 1938-39

Items.	Hyderabad (R. E. 1938-39)	Mysore (Ac. 1938-39)	Travancore (Ac. 1938-39)	Baroda (R. E. 1938-39)	Jammu and Kashmir (R. E. 1938-39)	Cochin (Ac. 1938-39)	Indore (E. 1938-39)	Bikaner (E. 1938-39)
1 Direct Demand on Revenue.	1,53,01,600 16·37	49,07,175 12·19	30,16,493 11·80	27,7[illegible],450 12·38	28,61,000 12·47	10,36,969 10·84	16,63,600 13·97	8,70,370 13·15
2 General Administration.	1,97,58,400 21·14	80,89,758 20·09	75,45,137 29·52	55,28,650 24·69	70,87,000 30·88	23,20,173 24·26	38,80,000 32·59	17,68,476 26·73
3 Palace ...	61,97,200 6·63	29,26,071 7·27	18,70,933 7·32	28,92,200 12·92	26,28,000 11·45	8,15,674 8·53	19,61,000 16·47	15,31,131 23·14
4 Debt Charges	69,72,000 7·46	77,18,308 19·17	11,89,517 4·65	2,72,000 1·21	2,15,000 0·94	5,95,598 6·23	Nil.	70,000 1·06
5 Military ...	86,19,700 9·22	15,66,788 3·89	10,19,925 3·99	22,00,000 9·83	47,80,000 20·83	1,11,604 1·17	9,83,100 8·26	8,00,717 12·10
6 Education ...	99,01,400 10·60	54,00,055 13·41	50,49,325 19·75	38,25,000 17·08	20,77,000 9·05	18,67,412 19·52	9,71,400 8·16	3,94,175 5·96
7 Public health and Medical.	3304,000 3·54	19,73,387 4·90	14,16,016 5·54	8,38,000 3·74	9,04,000 3·94	7,32,184 7·65	3,90,300 3·[illegible]8	4,39,154 6·63
8 Agriculture, Co-operation, etc.	20,50,400 2·19	12,71,847 3·16	3,31,273 1·30	6,90,000 3·08	5,26,000 2·29	3,56,363 5·73	1,25,700 1·06	39,022 0·60
9 Industries ...	3,23,100 0·35	2,78,469 0·69	1,90,454 0·75	1,59,700 0·71	1,51,000 0·66	1,55,538 1·63	5,11,700 4·30	1,330 0·02
10 Public Works	1,77,52,8[illegible]0 19·00	42,17,999 10·48	30,75,478 12·03	32,12,000 14·35	17,20,000 7·49	12,55,55[illegible] 13·33	13,69,800 11·50	7,02,466 10·62
11 Charities & Depressed classes.	Nil	Nil.	48,504 0·19	Nil.	Nil.	1,17,733 1·23	Nil.	Nil.
12 Famine Relief	32,67,900 3·50	Nil.	Nil.	Nil.	Nil	Nil.	50,000 0·42	Nil.
13 Subsidy to Br. Government.	Nil	19,11,000 4·75	8,10,653 3·17	Nil.	Nil.	2,00,089 2·09	Nil.	Nil.
Total ...	9,34,48,500	4,02,60,857	2,55,64,008	2,23,90,000	2,29,49,000	95,64,890	1,19,07,200	66,16,841

" BRITISH " & " INDIAN " FINANCE

BY

S. KESAVA IYENGAR.

The wonderful peculiarity of human nature is that it adjusts itself to changing conditions quickly, and habit becomes second nature: on matters economic in India, British policy has had its say for a century and more, and although Indians are not low in their voices in declaring to the four corners of the world the fundamental rights of Indians to manage their own affairs (and even in the evolution of a new world order to come!), a careful study of facts cannot but lead to one conclusion; namely, the European power-wielders have developed an almost permanent tendency to believe that whatever they might do in India must be interpreted by themselves, Indians and foreigners as for the real good of India; and if things are somewhat shady in certain respects, the cause lies in some inherent weaknesses of the Indians themselves. On the Indian side, camels are passing through the needle's eye, but the great majority of Indians content themselves with debates on general principles, consciously or unconsciously avoiding direct and plain speaking on the contents and colour of British economic policy in India. Numerous Indians have excelled in oratory crediting British policy in India with more statesmanship than exercised or desired by the British themselves. This surprising attitude on both the sides must become evident to any one who for a moment detaches one's self from the almost smothering environment. One field in which such an anomalous position has persisted prominently is British finance in India. The country is quite rich in natural resources, but the authorities have not done all they could to let the people know all about it. The people are quite poor, and the authorities would like them to believe that they are much poorer than actually they are—often with the help of questionable and superficial statistics—all this with the

purpose of helping in the entire population passing if not respecting the idea that the British have been and are the saviours of Indian economy.

Irrigation and Hydro-Electricity

Mettur and Pykara projects which earned 4·47 and 7·26 per cent respectively on capital outlay for the last year, are the latest instances of Government activity in utilising water resources for irrigation and hydro-electricity as well in British India, but it was in 1902 that hydro-electric power was produced at Shivanasamudram in Mysore, for the first time in the East. Since then, the great Krishnaraja Sagara project with the Irwin Canal and the hydro-electric section, nine further extensions in the Shivanasamudram Works, the Shimsha and the Jog Works have all maintained the Mysore State in the front rank in this respect in India. Apart from the Tata Hydro-electric Agencies, Ltd. (which is due to the driving power of the famous Tata family that found such successful expression in numerous industrial fields), the capacity of the three works being 0·246 million H. P., the Mysore Government electric installations rank first among Government undertakings, the capacity of the Mysore Works at present being 0·107 million H. P. The Industrial Commission wanted a thorough-going hydro-graphic survey more than a score of years ago, but we have had only " outlines of programmes of investigations " till now. The *net* revenue from electricity was Rs. 46·69 lakhs in 1938-39 in Mysore, excluding contributions to depreciation and provident funds, and 12 per cent of the gross revenue of the State was realised in that year from Krishnaraja Sagara, hydro-electric and other irrigation works. The natural resources have been developed so efficiently that the working cost per unit of electric current was 1·97 pies in that year. Cheap electricity has been the forerunner of numerous industries the first of which to use current in large quantity was the Kolar Gold Fields. The Mysore Iron & Steel Works, the Paper Mills, the Cement Factory and numerous others followed in deriving power from Shivanasamudram and Krishnaraja Sagara. The power generated was 252,095,833 B. O. T. U., of which 207,600,804 B. O. T. U. were distributed during 1938-39,

to power and lighting and pumping installations. Four hundred and seventy-five power installations and 3,699 lighting installations were added, bringing the total number in service to 4,815 of the former and 38,370 of the latter. Besides these, there were 17,225 street lights (inclusive of 2,930 ornamental lights). Of the total number of units sold during the month of August, 1940,677,807 K. W. hours were for domestic purposes, 16,148,541 K. W. hours for power (industrial, etc.) and 545,726 K. W. hours for street lights. The total number of consumers during August, 1940, amounted to 46,957 as against 46,690 in July, 1940. The number of towns and villages electrified was 198. It can be asserted that electricity has become quite popular in villages as well as in towns—for lighting and for power. The astounding success of the Mysore Sugar Company is due to the vast expansion in wet cultivation brought about by the channels from the Krishnaraja Sagara. The benefits of both irrigation and hydro-electricity have been spread practically to all the districts and the scope for the development of garden factories in nooks and corners of the State, using this power, is very great in the near future. The expenditure on capital works not charged to revenue, to the end of June, 1939, was Rs. 18·1 crores while the liabilities on account of public debt and unfunded debt on the same date was Rs. 14·2 crores. The interest charges on the debt are much lower than the yield on the capital outlay, and the general tax-payer is thus saved from taxation to the extent of the difference between the two. This is the chief cause for the increase in the income of the Government in about 17 years by one crore of rupees.

The programme of the Hyderabad State in the matter of irrigation and hydro-electricity has a thoroughness and steadiness of its own. The following table shows the great schemes the Hyderabad Government have before them for the next few decades in order to raise the standard of life in the State by bringing three million more acres under irrigation and supplying over 200,000 K. W. electric power for industries and for homesteads. The bill is expected to go up to over 65 crores, but the foundations so soundly laid and the basement constructed thereon during the last 18 years

can be expected with confidence to accommodate this huge financial superstructure which will house the entire population in comfort. But how speedily these projects will be taken up and completed will, to no small extent, depend on co-operation by the British Government in India: many of the projects are interstatal.

Statement.

Name of project.		Area estimated to be irrigated—in acres.	Estimated generation of electric power in K. W.
Tungabhadra	...	500,000	38,000
Devanur	...	...	17,800
Nizamsagar	...	...	2,800
Kaddam	...	20,000	7,000
Purna	...	60,000	4,000
Manair	...	10,000	700
Penganga	...	...	7,000
Godavari	...	...	65,000
Lower Krishna	...	1,000,000	50,000
Upper Krishna	...	1,000,000	30,000
Bheema	...	400,000	
Bandarpally	...	10,000	
		3,000,000	222,300

This is apart from the expenditure already incurred so far on minor irrigation works in the State which amounts to over six crores. Major irrigation works like the Nizamsagar, Pocharum, Wyra, Palair, etc., have cost the State another six crores. The total revenues of the State from irrigation were Rs. 144 lakhs in 1935 and Rs. 145 lakhs in 1936: this was in spite of a period of depression.

In British India, we have some big enterprises in this field in addition to the 154 crores invested on irrigation works, but compared to the resources available and the size of the country, the pace of advance has been slow. And now with war prepossession, and with suspended constitutions,

there is every fear of such projects being postponed for long periods of time. In a recent address to the Central Irrigation Board, the Viceroy said: "The return on the vast capital investment of 154 crores is not to be measured in terms of revenue, but in the more precious currency of human life and prosperity." What he said of irrigation applies with full force to hydro-electricity as well, and such a postponement of a forward policy in hydro-electricity would be doubly regrettable as so much revenue to Government would be unutilised, and so much basic encouragement to industries great and small would be denied. We have not even a thorough-going all-British India irrigation and hydro-electric survey: the major portion of our knowledge of Indian economic potentialities is from the huge blanks on our maps. The hydro-electric potential of India is estimated at 27 million H. P. but the developed power is only 0·8 million H. P. or about 3 per cent.

State-Owned and State-Aided Industries

The Mysore Administration Report for 1938-39 says: "Thirteen large industrial concerns with a total fixed and working capital of more than three crores of rupees are completely owned and managed by Government. About 18 concerns have been started by private enterprise with the assistance of Government in the form of subscription to their share capital or in the shape of grant of land, water, electric power, etc., free of charge or at concessional rates, while a very large number of concerns have been started by private industrialists on their own initiative or with the financial and technical assistance of Government. An analysis of the various concerns shows that 107 concerns were engaged in industries connected with food, drink and tobacco, such as rice mills, flour mills, manufacture of *bidi* and cigarette, confectionary, etc. There were 19 brick and tile factories, 7 soap factories, 3 concerns engaged in the manufacture of electrical goods, 8 concerns in furniture-making, 1 in the manufacture of incandescent gas mantles and others engaged in the manufacture of ball thread, cotton rope-making, cart-making, type-casting, bleaching and dyeing."

These figures are exclusive of the Kolar Gold Fields, some details of which follow. Amongst the Government concerns, the industry that had the most chequered career was the Mysore Iron & Steel Works. Sir M. Visvesvaraya poineered in this, and for a long time was the butt of criticism for having let down the Mysore Government badly on this account. These vicissitudes have passed, and to-day, the Mysore Iron & Steel Works are earning *net* about 26 lakhs a year, besides affording considerable employment to local skilled and unskilled labour. In the early stages, the general manager was once afraid to tell the then chairman (Sir M. Visvesvaraya) that the anticipated deficit on the Works would be a lakh. The chairman is reported to have smiled and exclaimed: "Is that all? I expected the deficit to be much more than that!" On account of the Mysore Iron & Steel Works, the Mysore State has attained in the eyes of the world a status which no treaty could give her. The latest feature of industrial development in Mysore is the deliberate founding of new industries in far-off places (even now, the major industries are dispersed all over the State) so that all the evils of urban congestion might be eschewed: that has been made possible by cheap electric power which requires little capital outlay for transmission.

Another special feature of Mysore industrial development is the high level of the mutual complementing as amongst different Government and private industries. A few instances may be mentioned. The Electric Department will have contributed in all Rs. 3·2 lakhs by the end of 1940-41 towards the construction of the railway line from Sagara to Thalaguppa in view of the facilities accruing to that Department by the said extension for transporting machinery, etc. for the hydro-electric works at Jog Falls. The Mysore Railways allow special freights on through exports of Mysore manufactures, for mutual good. The Government Electrical and Porcelain Factories work with electric power supplied by the Electric Department, and they in turn supply electrical accessories to that Department. The Forest Department supplies *baligi* poles which lessen the cost of capital outlay on electric main lines. The Mysore Iron & Steel Works derive electricity from Govern-

ment supplies, and all iron and steel that could be made by the Works are made available to the Electric Department. The Mysore Sugar Mills supply molasses for dust-proofing the roads. The cheapness and utility of these numerous manufactures are brought home to the man in the street through the Dasara Exhibition which is an annual feature. Among the war industries actually working and about to be started are soda, chromite, acids and aeroplanes.

The appointment of a Government Director for industrial concerns signifies the maintenance of a consistent policy on all matters pertaining to costs and prices, wages and profits. It may be that the U. S. S. R. has got more numerous and larger-scale industries, but it cannot be denied that Mysore has achieved a higher degree of success in handling these Government and Government-aided industries, not only in the matter of direct yield on capital outlay but in the more important items of employment and wages, prices and consumption, and the further stimulus to consequential industries. The fact that the services of the Government Director of Industrial Concerns have been borrowed by the Indian Supply Board is a proof of the pudding.

With the inauguration of Industrial Trust Fund with a corpus of one crore of rupees, a new chapter in the development of Hyderabad industries has begun. Among the present large-scale industries are six cotton mills, the cement factory at Shahabad producing about a lakh and half tons of cement annually, and the Singareni Collieries which produce about three-quarters of a million tons of coal every year. The biggest industry in the State is of course the Nizam's State Railway. The new policy of co-ordinating road, rail and air with plans to reach the outermost corners of the Dominions has proved very successful. The large and growing number of connections between bus and railway routes at suitable points and at suitable timings, the spread of the Road Motor Transport Services to areas which from the point of view of traffic could never hope to be served by the Railway, the introduction of railway lorries for the conveyance of goods over comparatively long distances along roads, and the close co-operation of the Road, Railway and

the Civil Aviation Boards augur speedy prosperities to the villagers through profitable cottage industries as well as through fair prices for agricultural produce. A ten-year programme built on this co-ordinated system should bring up Hyderabad to the level of Britain: such is the wonderful success attained by the road section of the Nizam's State Railway. The latest development in co-ordination in the process of mobilisation is the appointment of the General Manager of the N. S. Railway as Adviser to the Commerce and Industry Member of the Executive Council. In addition to immediate attention to war industries, the Hyderabad Government is at present engaged in drawing up plans for a commensurate expansion in the cotton and vegetable oil industries for which there is very great scope in view of the huge production in the State of the concerned raw materials. The development of irrigation and hydro-electricity and the ramification of the entire State by the co-ordinated transport services, will bring in their train more raw material and a much greater proportion of manufacture of these materials within the Dominions.

Wise Taxation

On the average, the Kolar Gold Fields produce about Rs. 3 crores worth of gold annually at present prices. The leases to the British Companies expired on March 21, 1940, and the best course for the State would have been to take over the mines for being worked by the Government: any other course could not be conceived of for a Government which has been taking so much pains to launch new industries. But, political pressure is taller in Indian States than in British India on some matters, and although the leases to the three companies were renewed for another 30 years, credit is due to that Government for having succeeded in securing from these mines the best they could in the shape of mining royalty, special levy on gold, income and super tax—which are estimated at about three-quarters of a crore annually, or about 25 per cent of gross yield. It is of considerable interest to remember that while in South Africa the confiscation of the full price over and above 150s. has been discontinued and a new formula introduced according to which

the Union Government gets annually about £2 million as loan and about £3½ million as tax, while the Australian Commonwealth Government takes only 50 per cent of the excess over a basic price, the Mysore Government have succeeded in making the mines pay 75 per cent of the excess of price over and above 150s. per fine ounce of gold produced, *and this not as a war measure as in other gold producing countries, but as a permanent measure, of course provided the price of gold continues to be above 150s. per ounce.* The companies have not been slow in complaining: they have even gone so far as to claim that this new levy by the Mysore Government resulted in less tax payment to the British Government (during war time when every member of the Empire should contribute its very best) as the taxable amount of profit decreased on account of the new levy, but the Mysore Government pulled through. It is almost certain that if the Kolar Gold Fields were in British India, the new levy yielding annually Rs. 26 lakhs, would not have been made: the country would have lost the proceeds: the British shareholders would have gained.

"British" versus Mysore Finance.

Irrigation, electricity, industries and gold—these have been the mainstay of Mysore's financial prosperity so far and of the still brighter prospect in the near future. And the credit for this achievement looms still larger when we remember that Mysore's path has not been all rosy. In spite of recent re-organisation of all-India defence taking into account Indian States as integral parts of the system, the annual subsidy of Rs. 19·11 lakhs (recently reduced from Rs. 25 lakhs) persists, and is sitting as a deadweight against the uphill task of social amelioration. The retrocession of Bangalore has been hanging for reasons known neither to the Mysore Government nor to Simla, and naturally the net residue reaching the Mysore coffers from the Administered Areas continues to tend to be at the possible minimum. As Sir Mirza Ismail said once pithily, Mysore administration has nothing in its pocket to be ashamed of, and it is the barest duty of the Central Government to co-operate with the Mysore Government in the latter's march forward, by

cancelling the tribute and handing back the Administered Areas in Bangalore. Contributions are due to the Mysore Government from the Government of India on account of currency, posts and telegraphs, customs and petrol excise—all of which have been allowed or offered to certain other States by the British Government and not to this front-rank State. On railway and harbour facilities, the attitude of the British Government is equally mysterious. The small gap between Chamarajanagar and Satyamangalam (now being linked at heavy cost to some extent by buses and lorries) should have been connected long ago, the result of which would have been to make the Hindupur-Satyamangalam line the chief artery for traffic between North and South India. Hyderabad fared better by connecting Gadwal and Karnool (thus connecting Manmad and Chamarajanagar) and Kazipet and Ballarsha (connecting the extreme south of India with Delhi and the northern frontier). But, the M. S. M. Rly. Company and the British Government have closely co-operated in postponing this vital connection between Chamarajanagar and Satyamangalam. Similarly, the Bhatkal railway and harbour scheme has been put in the ice box for decades with the result that the rich potentialities of the Mysore Malnad are still a sealed book for want of an outlet, and Mysore trade suffers the unjust extra transportation charges between Bombay and Bangalore to and fro. In all these matters, it is hoped that with the advent of the new Ruler to the throne of Mysore, a new momentum will be initiated towards the satisfactory solution of these outstanding and fundamental financial problems.

Readjustment of Fundamentals

Financial ills of governments in India have been chronic for three main reasons—apart from wanton extravagance and consequent insolvency which might be considered an abnormality. The system of annual budgets and lapses usually caused hurry and waste in the closing weeks of the financial year: it was like seasonal fever which caused many an error of judgment and left the organism weak for the next few months—to be followed again by the next season of excitement and unsteadiness. The next handicap was that

the purpose of supporting the purchasing power of the Hyderabad currency. In addition to the general and deposits reserve, a new reserve was constituted later called the industrial reserve for giving help in the shape of debentures or loans or advances at moderate rates of interest to large industrial concerns, and to use the interest itself in helping smaller industries.

The third and the most important reform is known as the departmentalisation of the finances. Under this scheme, the Finance Department makes a forecast at the beginning of each triennial period of revenues which are likely under normal conditions to accrue during the three years. With this as a guide and in consultation with the other departments of Government, the Finance Department fixes the normal budget grant of each department for each year of the triennial period. The word " normal " might perhaps convey the false impression that the forecast will be rigid and static, making no allowance for provision for growth and development during the contract period. Nothing could be farther from the truth. In fact, just as the forecast of revenue made at the beginning of each triennium on which the norm of revenue is based, includes anticipated ordinary increases, so the estimate of the annual requirements of each department, framed in consultation with that department, on which the norm of expenditure is fixed, includes provision for such development as the department can foresee during the three-year period. If, on the conclusion of a triennial period there is any surplus, that surplus also is distributed among the various departments together with a moiety of the estimated amount which a department has failed to spend at the end of the contractual period, while the other moiety continues to stand to the credit of that department during the next triennium. From the reserves thus created, extra grants are made—preferably for schemes which do not involve a recurring liability, which can be completed in a given time and the total cost of which from start to finish can be reckoned; such for example as the provision of buildings and equipment for various departments, especially those concerned with internal development, roads and communications.

In order that expenditure under such heads as famine (which recurs inevitably but after a cycle of years), or redemption of debt which has to be effected in a given period, may not cause any disturbance in an otherwise clear financial programme, regular and separate reserves have been formed, to which fixed annual allotments are made so that the estimated liability may be covered when it actually occurs, without affecting normal activities.

The system makes for a well deliberated and far-seeing programme with due care and economy in the expenditure. It avoids the rush of often hurried and ill-considered expenditure at the end of a budget year in which the spending departments are apt to indulge, where the system of grants lapsing at the close of the financial year obtains. Although the Finance Department expressly reserves to itself the right to reduce the contract grants of the various departments in case of some grave financial emergency, it has not so far exercised this right. During the last 18 years, not only have the triennial contracts with the departments never once been broken, but where good and sufficient reason has been shown, Government have sanctioned extraordinary expenditure by departments over and above contract grants.

It was in 1922-23 that these reforms were introduced in all departments in Hyderabad, and similar reforms with some variations were contained in the convention of the separation of the railway from the general budget of the Government of India in 1924. Eighteen and sixteen years have passed respectively after these events, but what wonderfully different results have emanated! The prime fact to be noted is that the Finance Department in Hyderabad has been all eyes during these 18 years while the British Indian Finance Department has given proof of a prolonged coma during the 16 years following the railway budget convention, in so far as little was done to check the growing deterioration in railway finance. Timely checks should have saved both the railway and the general coffers of the Government of India from the present losing position.

First Fruits of Hyderabad Financial Reforms

The following are the first fruits of the financial reforms

in Hyderabad, during the fifteen years for which the Right Honourable Sir Akbar Hydari was Finance Member after the reorganisation was begun by himself:

"The surpluses that accrued from the excess of current revenue over current expenditure amounted to about 14½ crores. Out of these, almost half was given to departments, mainly Public Works for buildings and roads, and nearly one-fourth was laid aside for famine insurance and debt redemption. Of the remainder, three-fourths of a crore was used in instituting the Industrial Trust Fund, and over 3 crores for the purhcase of the Railway (which was not expenditure but a well paying investment). The capital outlay during this period was 13½ crores as shown below:

(1) Rs. 7 crores for the construction of new railway lines;

(2) Rs. 5½ crores for irrigation works;

(3) Rs. ½ crore on City Electricity;

(4) Rs. 25 lakhs on telephones and district electricity; and

(5) Rs. 25 lakhs on miscellaneous capital undertakings like mines, printing, etc.

Against these assets in the form of capital outlay and reserve, the debt outstanding was only Rs. 7¼ crores. We have in the Railway and the City Electricity Department two valuable assets which on our books stand at about Rs. 18½ crores, bringing in a net annual income of nearly Rs. 1¼ crore, and the various reserves amounting to over 12½ crores have been fully invested in securities of the Government of India."

Sir Akbar's own words and those of his successors in the Finance Department depict the situation best:

"It seems paradoxical that with revenues hard hit by the prevailing depression and without levying any extra burden on the tax-pyer of the State, who I may add in parenthesis has never yet paid any income-tax, it has been possible for financial equilibrium to be maintained. The

result is entirely due to two factors. One is that the expenditure of these Dominions has not been geared up to a high level of taxation. The other and equally important factor has been that His Exalted Highness' Government have ever since the beginning of this century believed in steady rather than in a spectacular advance in the matter of expenditure. Step by step, as funds become available, activities begun at first on a small scale have only been expanded, if justified in the light of experience and as funds became available. This applies more especially to recurring expenditure. H. E. H.'s Government have always been and still are extremely strict in adding to their permanent recurring liabilities. This is not to say that every year does not see some addition to our recurring expenditure: we add to it gradually as we see our resources expanding and not in vague anticipation of expanding revenues. The same policy of embarking on projects only when funds are available or in sight, has been followed in regard to non-recurring expenditure, such as on irrigation works, roads and railways; but because from its very nature, capital expenditure on any scheme is limited in its duration and the total cost capable of being estimated, Government has been able to be much more generous towards schemes of non-recurring expenditure than it has been and is to expenditure entailing a permanent addition to our liabilities. It is light taxation and a strict control over increases in recurring expenditure that has under Providence enabled these Dominions to come through financially sound out of perhaps the most difficult period in their recent economic history" (extract from Sir Akbar Hydari's Budget Note for 1933-34).

"Within this steel frame of prudent finance (Sir Akbar's), freest scope is allowed for the growth and development of the Departments; and although the rules do not entitle a Department to demand fresh allotments during the currency of a triennium, the Finance Department endeavours to meet any unexpected requirements that the Departments can justify. That the contracts with the Departments are made in a generous spirit will be evident from the fact that unspent amounts, half of which the Departments were allowed again to take to their credit for the next triennium,

amounted to Rs. 35·69 lakhs in 1332—34[3] (1923—25), Rs. 48·91 lakhs in 1335—37 (1926—1928), Rs. 85·99 lakhs in 1338—40 (1929—31), Rs. 101·05 lakhs in 1341—43 (1932—34) and are expected to come to Rs. 77·87 lakhs in 1344—46 (1935—37). The actual Departmental savings in this triennium were Rs. 151·22 lakhs. Every pie of the surplus that accrues from year to year is distributed in the shape of additional non-recurring grants for departmental equipment and works of public improvement and utility. One special feature of Hyderabad Finance is that it eliminates the chances of deficit budgets. Surplus is touched only when it actually accrues and not before. Loans for financing capital works and commercial undertakings are not floated unless an adequate provision to the credit of the Debt Redemption Fund is made in the Budget for its complete amortisation before the date of maturity. The creation of the Famine Reserve which stands at the substantial figure of Rs. 285 lakhs insures against disturbances which the occurrence of famine conditions must otherwise cause." (Extract from Nawab Fakhr Yar Jung Bahadur's Budget Note for 1937-38).

"When I presented my Budget last year, I had stated that we looked to the future with confidence: this optimism I still maintain. If we steadily pursue the policy hitherto followed of regulating the growth of expenditure according to the resources at our disposal, the stability of Hyderabad Finances must continue unshaken. A faster pace must be attended by an equally rapid development of potentialities of existing resources or the search for new ones." (Extract from Nawab Fakhr Yar Jung Bahadur's Budget Note for 1938-39).

"I may mention in the end that the Finance Department had made it their special care to see that all proposals affecting the prosperity and the advancement of the people of Hyderabad should not suffer for want of timely financing. With this object in view the Finance Department have, in spite of the strain of war, and famine, undertaken to advance a loan of Rs. 40 lakhs to the Hyderabad Municipal corpo-

[3] The Hyderabad year is "Fasli"—from October to September.

ration for providing civic amenities to its citizens. A loan of Rs. 15 lakhs is being given to the District Local Funds for carrying out their public schemes with expedition. The grant of the Well Sinking Department has been increased from Rs. 5 to Rs. 8 lakhs, so that protected water supply may be provided in all the villages of the Dominions. An additional grant of Rs. 5 lakhs has been given to the District Water Works for 3 years to accelerate the progress of drainage and water works in the Districts. The Finance Department have also taken upon themselves the liability of meeting the cost of the Public Health Scheme and dispensaries in district towns which at present are borne by the medical cess of the local funds, so that the district local bodies may not be handicapped in starting their labours under the new Constitution. The cost of primary education has been taken over by the Government, for which the Finance Department had provided an additional allotment of Rs. 7½ lakhs in the current triennium with a promise to raise it to Rs. 12½ lakhs in the course of the following five years, which promise has been redeemed by providing the additional one lakh in 1350 (1940-41) Budget. The Finance Department are fully alive to the necessity of developing the industries of the State, and would offer full support to the Advisory Committee which has been set up by Government for furthering the industrial development of the Dominions taking advantage of conditions created by the War." (Extract from Nawab Mahdi Yar Jung Bahadur's Budget Note for 1350 (1940-41).

On 6th October, 1940, the several Reserves were

		O. S. Rs. in lakhs
Debt Redemption Reserve	...	337·54
Famine Reserve	...	293·38
Industrial Reserve	...	219·15
O. S. Stabilisation Reserve	...	361·62
Deposits & General Reserve	...	64·67
Paper Currency Reserve	...	1650·94

Financial Protestantism

"The theory of Economics does not provide a body of settled conclusions immediately applicable to policy. *It is*

a method rather than a doctrine, an apparatus of mind, a technique of thinking, which helps its possessors to derive correct conclusions."—J. M. KEYNES.

This idea is perhaps vividly illustrated by the financial method and policy inaugurated by the Rt. Hon'ble Sir Akbar Hydari in 1922 and worked so successfully over a period of 18 years. From the viewpoint of orthodox axioms and practice in Finance, Sir Akbar's triennial contracts, his adherence to the generally considered obsolete sources of revenue, and his beginning at the "receipts" end and "cutting the coat according to the cloth" in schemes and measures of social advancement and relief—these should look heterodox, but the conclusions have proved correct and efficacious in practice. And the "technique of thinking" possessed by this veteran financier has drawn for him unqualified appreciation at the hands of all wings of economic and financial thought.

British Indian Railways

The ills of the British Indian Railways are too well known to need any detailed narration. It will serve our purpose if we review the events briefly. Started in 1845, the Great Indian Mutiny gave an impetus to the extension of the Indian Railway system, and that with British capital ("there was no private capital in India for railway construction"—so that two birds might be killed with one stone. 1859 saw the contracts with 8 British companies for the construction of 5,000 miles of Indian railway, involving a capital outlay of £52 million. Interest was guaranteed at 5 per cent (half-yearly settlement at 22d. per rupee) by the Government, and land was to be granted free. Any surplus was to be divided between the Government and the companies half and half. At the end of 25 years, the Government of India could take over on fixed terms, and even before that, Government was entitled to supervise expenditure and the working of the companies. The contracts proved very expensive, there having been over-capitalisation practically at every step, ignoring local conditions. Deficits began on railways, and then Government launched a policy of railway construction directly by themselves. This proved a failure

and once again railway construction was given over to companies—this time on easier terms. During the severe famine and exchange weakness of 1879, 4 companies were floated, and the Nizam's Guaranteed State Railway Company was guaranteed interest on 330 miles of railway. By 1890, 8494 miles had been completed, but the frontier lines were "ballasted with rupees"—such was the heavy capital outlay per mile.

In the 20th century, the financial results of the Indian railways were spasmodic, sometimes yielding small net returns, often developing heavy deficits: in the year 1900, there was a small profit for the first time, and railway earnings were

Year.			Net gain £ million
1907-08	...	...	+ 2·000
1908-09	...	...	– 1·243
1919-20	...	...	+ 10·573
1920-21	...	...	+ 3·767
1921-22	...	...	– 6·182

As a result of action on the Acworth Committee Report, the earnings were

1922-23	...	...	+ 0·813
1923-24	...	...	+ 4·275
1924-25	...	...	+ 8·579
1925-26	...	...	+ 5·796

The main recommendations of the Acworth Committee were that economy should be realised by amalgamating smaller companies, and that private enterprise should be allowed to come in only when the State could not do construction work for any special reasons.

Then came the Convention on the separation of the Railway Budget, and all seemed well. "The final resolution agreed to by the Assembly on September 20, 1924, and accepted by Government differed from the original resolution in that the yearly contribution had been placed at 1 per cent instead of 5/6th per cent on the capital at charge,

and if the surplus remaining after this payment to general revenues should exceed Rs. 3 crores, only 2/3rds of the excess over 3 crores were to be transferred to the Railway Reserve and the remaining one-third was to accrue to general revenues. At the same time, a Standing Finance Committee for Railways was to be constituted to examine the estimate of railway expenditure and the demand for grants, the programme of revenue expenditure being shown under a depreciation fund. This committee was to consist of one nominated official member of the Legislative Assembly as chairman, and 11 members elected by the Legislative Assembly from that body. This would be in addition to the Central Advisory Council which will include the members of the standing committee for Finance and certain other official and non-official members from the Legislative Assembly and the Council of State. These arrangements were to be subject to periodic revision, but to be provisionally tried for at least 3 years. They would, however, only hold good as long as the E. I. Ry. and the G. I. P. Ry. and existing State-managed railways remained under State management, and if any contract for the transfer of any of the above to company management was concluded, against the advice of the Assembly, the Assembly would be at liberty to terminate the arrangements in this Resolution. The Assembly in an Addendum recommended that the Railway services and the Railway Board should be rapidly Indianised and that the stores for the State-managed Railways should be purchased through the organisation of the Indian Stores Department."

The State Railways in British Indian earned the following rates on capital at charge during the years succeeding the 1924 Convention:

Year.	Rate of return per cent.
1924-25	5·9
1925-26	5·2
1926-27	4·9
1927-28	5·3
1928-29	5·0
1929-30	4·5

British Indian Railway "Raids"

With the 1930 depression, the story of the Indian railways turned round the corner into a series of deficits. "The precise nature of the present difficulties is mainly the consequence of the financial policies pursued by the Indian Railways after the advent of the depression in 1930." The practice of postponing their current liabilities and draining on their reserves was allowed to continue for about a decade by the Finance Department and the Finance Committees at the Centre, and naturally the position became quite hopeless at the end of the period—that of a spoilt child grown into comparatively inelastic manhood. The Railway Reserve Fund was wiped out, the Railway Depreciation Fund was drawn on and reduced to a half, and the contributions to the general revenues according to the 1924 Convention were suspended. By April 1, 1940, the accumulated deficits of 10 years were Rs. 67 crores, working at 8·8 per cent of the capital-at-charge on State-owned railways. The three years' moratorium spelt, not a revival, but definitely worse conditions. Attempts were made to score out these accumulated dues so that the Railway management could continue with their "raids" with greater legitimacy and equanimity, but both the Central Legislature and the Wedgwood Committee were against this. Luckily for the railway " experts," the war came in, and naturally, there was no time to think of the 1924 Convention and the dues on account of past deficits. On the other hand, a new policy has begun of seriously claiming that the Indian railways have worked very well financially, and they stand much better compared to the railways in other countries. The old dues are ignored, and it is claimed that during the years 1938-39, 1939-40 and 1940-41 (estimates), the "surpluses" work at Rs. 1·37, Rs. 3·61 and Rs. 8·29 crores! It is declared: "The facts warrant quite a gratifying view of the financial position of Indian railways in the existing unsettled world conditions."

" Howling from roof tops " with the hope that even black lies will change into accepted truths by repeated dinning—that is Dr. Goebbels' formula, but the widely advertised claims of the British Indian Railways are no less

chimerical. As though all considerations were not given due weight at the time of the Railway Convention, strategic lines are said to involve the general railway finances in a deficit of Rs. 2 crores annually, and it is claimed that this should be excluded while judging on the working of the Indian railways. In many cases, it is claimed, purchase prices were at premium, and therefore, due margin should be left on that account also. These purchase prices were paid with full consciousness, and the Railway Budget must face the consequences thereof. Here again, the unequivocal negligence of the Central Finance Standing Committee, the Central Finance Department and other concerned bodies is clear. Capital outlay on many other lines is not remunerative, and yet guaranteed interest has got to be paid. In this the responsibility of the Finance Department is plain—the rates of interest should have been brought down by negotiation or at the expiry of leases, to fit in with the general economic conditions of the concerned railways, and again, costs should have been cut down on lines which tended to prove unremunerative.

Fourthly, it is claimed, the Wedgwood Committee was not able to point out any further economies of first-class magnitude. It does not require any committee to say that the coat should be cut according to the cloth available, and if the Finance Department thought that the railways could be allowed to develop into a white elephant feeding on the general revenues of the Centre and Provinces, that was the "unkindest cut" they could make on their defenceless "ward." Another contention was that the Indian railways were losing about Rs. 4·5 crores a year on account of road competition. The Mitchell-Kirkness Committee on road and railway competition was published in 1933, but little has come out of it in practical economy and co-ordination. The predicament is entirely due to bankruptcy in policy. The splendid results shown by the Hyderabad State as a consequence of the co-ordination of rail, road and air, are given later in this Paper. Sixthly, it is argued that wages raised in times of high prices could not be reduced during depression. This argument would be all right provided the money to pay came from some body else's pocket, and so far

as the policy-mongers at the Centre were concerned,* the money did come from "somebody else" 's pockets.

The Niemeyer Diagnosis

The present position is that 6 out of 9 principal railways in British India are working at a loss even if actual interest charges are taken into account. There has been over-capitalisation even after 1924. Sir Otto Niemeyer made no secret of this and said: "The position of the railways is frankly disquieting. It is not enough to contemplate that in 5 years' time the railways may merely cease to be in deficit. Such a result would also tend to prejudice or delay the relief which the Provinces are entiled to expect. I believe that both the early establishment of effective co-ordination between the various modes of transport and the thorough-going overhaul of railway expenditure in itself are vital elements in the whole Provincial problem." On the contrary, the trend of expenditure is still on the rise, with numerous sinecure jobs and extra-national scales of salaries for British employees in view of war conditions. It should prove instructive to see that the ratio of working costs during 1938-39 was 67·1 on state-owned railways in British India, 49·3 on the Nizam's State Railway, and 70·29 on the Mysore State Railways—in the first two cases, including contributions to the respective Railway Depreciation Funds, in the last case including contributions to the Depreciation Fund and the Railway Surplus Profits Fund. To claim it as a credit that the ratio is lower on Indian railways than on British and American railways would be to close one's eyes to the fact that costs on account of raw material and labour are much lower in India than in those countries.

"Commercialise" Indian Railways

The glaring and haphazard mis-management of Indian railway finance has resulted in lowering the pulse of national economic life. Sir Otto Niemeyer's Award contemplated substantial contributions from the Central revenues to the Provinces for providing more reasonable funds for development work, out of the excess of railway contribution to the Central revenues and income-tax realisations put together,

but Sir Otto's hopes have been nipped in the bud, and due to war conditions, the Amending Orders have superseded the Niemeyer Award. What is the net result of all this? The Provinces left with lean resources with the hope of getting some support from the Centre, are left alone (some of them with depleted resources on account of the prohibition movement), and work is being manufactured for the new Federal Court in the shape of appeals against new Provincial taxation and surrender of old types of taxation. With the prospect of customs duties dwindling, partly on account of overseas supplies becoming less and less available, and partly due to development of indigenous industries, it would be a mystery if the Central Government did not, in the interests of the country as a whole, set up immediately, a Committee with full powers in order to concert measures for "commercialising" Indian railways, thus putting an end to the variegated fancy dress patrol we have had for about a century.

Hyderabad Railways

The picture of the Hyderabad Railways presents a strong contrast to this fairy (and sorry) tale of British Indian railways. The main features of Hyderabad railway finances have been the building-up of a special railway reserve which would enable the Government to purchase the Railway when the lease expired; continuous negotiation on saving for the Hyderabad Government, taxes levied by the British Government on shares held by the Hyderabad Government in the N. G. S. R. Company incorporated in England; great discretion in handling proposals for new lines or new connections on account of potential difficulties at the hands of the Government of India and the companies working neighbouring railway lines in the matter of rates and jurisdiction; the purchase of the Railway in 1930, fortyfive months before the expiry of the lease; and an extraordinary success after that in making the Railway pay better year after year, at the same time leading to substantial improvement in conveniences to the public, by launching a scheme of co-ordinating rail, road and air. Even by 1922, the Railway Purchase Reserve stood at about £2 million, and contributions were made every year to this Fund.

Rates & Jurisdiction

On the State policy towards the construction of the Gadwal-Karnool Section and the Kazipet-Ballarshah Line, the observations by the Rt. Hon'ble Sir Akbar Hydari (then Finance Member) run thus:

" The negotiations with regard to the construction of the Gadwal-Karnool and Kazipet-Ballarshah lines, have brought out into prominent relief the difficulties with which H.E.H.'s Government are confronted in their Railway programme on account of their land-locked position which necessitates their trunk lines being aligned on foreign railways at junctions in British India. One difficulty is the question of rates on which restrictions are sought to be imposed by neighbouring railways, in some cases even after the Government of India and the Secretary of State have accorded their sanction. These restrictions are in many cases obviously such as cannot be defended upon any ground of public policy other than a remote possibility of reduction, to a very small extent, in the earnings of these railways, a reduction which would in all probability be more than made up by the general increase that must follow any expansion of the railway system. Another difficulty is the demand for cession of jurisdiction on the whole course of the line which means the practical cutting off from H.E.H.'s Government of large slices of their territory. These and other difficulties must naturally tend on the one hand to divert the railway policy of the Government more and more from the construction of trunk lines which would link up the Dominions with the rest of British India and make their railways form an organic part of the general Indian railway system, and on the other hand to concentrate it more and more upon purely internal feeder lines where neither any question of rates is raised by neighbouring railways nor is any cession of jurisdiction demanded by the Government of India."

On the other hand, the position of the Nizam's State Railway on sections worked by them in British Indian territory, linking up their lines respectively with Manmad, Bezwada and Dronachalam, is an embarrassing one: "sovereignty" is retained on such sections by the British

Government, "possession" is ceded to the N. S. Ry., but "jurisdiction" (civil & criminal) is reserved by the British Government.

Unwise Taxation

Sir Akbar's observations on the injustice of British taxation on income from the property of the Hyderabad Government within their own jurisdiction but on the books of the N. G. S. R. Company in London, are equally frank:

" Although our railways are being now financed practically entirely by our Government, and their earnings are derived entirely from our own people in our own territory, yet owing to the Company running them being an English Company, even the moiety of the surplus profits that falls to the Government's share is subjected to very high English income and corporation taxes. The portion of the net earnings that will continue to find its way into the coffers of the Government of England, is so considerable as to make it imperatively necessary that our Railways are financed in a way that will enable the transfer of the Company from an English to a Hyderabad domicile being effected as early as possible."

The Hyderabad Railway Purchase

The purchase of the Railway in April, 1930, 45 months before the expiry of the lease, is another financial feat which has meant less payment, avoidance of deterioration of the railway during the last months of the lease, and scope for the Hyderabad Government to launch their new schemes earlier than otherwise. On April 1, 1930, £8·3 million were paid to the N. G. S. R. Company against a calculated liability of £8·432 million, thus saving for the State £132,565 plus the total net earnings as from that date, the details being as follows:

Value (on 1-4-1930) of the purchase price on January 1, 1934	£ 5,933,833
Value (on 1-4-1930) of the dividend that would have been earned by the N. G S R Company British shareholders during the 45 months ...	£ 2,118,187
	£ 8,652,020

Value (on 1-4-1930) of English income-tax saved by the Nizam's Government on their net earnings	£	380,545
	£	8,432,565

And this Hyderabad Railway Purchase was probably the very first case in India (in which British capital was directly concerned) where business considerations alone determined the course of action. It should have been very easy for the British Government to impede the negotiations in some way or other (if for nothing else, at least for saving the income and corporation taxes about to be lost): it should have been equally easy for the Government of India to "advise" the Imperial Bank against the accommodation given to the Hyderabad Government and against the trusteeship vested in its hands under the Agreement of March 8, 1930.

The normal rate of dividend distributed by the N.G.S.R. Company was 18 per cent, but the receipts on account of the Railway by the Hyderabad Government were quite small as shown below:—

YEAR.	Receipts by the Hyderabad Govt. from Railways.
1923-24	24·06 lakhs
1924-25	37·74 „
1925-26	32·15 „
1926-27	39·41 „
1927-28	37·12 „
1928-29	47·57 „
1929-30	45·72 „

British Indian and Hyderabad Railway Earnings

To what different results the care and watch of the Hyderabad Finance Department and the indifference and neglect of the Indian Finance Department have led can be seen from the following figures:

British Indian Railways		*Hyderabad Railways*
Open mileage	41,134	1,360
Capital at charge on March 31, 1939	Rs. 755 crores	1,458 lakhs.

Year.	Net return crores of Rs.	percentage of return.	Net return lakhs of Rs.	Percentage of return.
1930-31	26·02	3·5	108·98	8·1
1931-32	22·93	3·0	91·47	6·7
1932-33	21·86	2·9	84·86	5·9
1933-34	23·69	3·1	83·80	5·8
1934-35	25·70	3·4	89·79	6·2
1935-36	26·51	3·5	85·96	5·9
1936-37	30·84	4·1	108·71	7·4
1937-38	32·02	4·2	122·46	8·3
1938-39	30·67	4·1	116·35	8·0

On 31—3—1940, the British Indian Railway Depreciation Fund had Rs. 30·58 crores, and the Hyderabad Railway Depreciation Fund was at Rs. 81·4 lakhs, the General Railway Reserve Fund of the latter having been at Rs. 23·29 lakhs. The British Indian Reserve works at less than 4 per cent on capital at charge: the two Hyderabad Reserves put together work at more than 7 per cent.

The figures in this Table for Hyderabad State are all in B. G. Rs. only.

Note—"Return on outlay" is arrived at after taking into account contributions made to the depreciation fund, but is different from "net profit."

At the Hyderabad rate of return, the net earnings from the British Indian Railways should have been, not Rs. 30·67 crores, but Rs. 60·40 crores; that is, the earnings are 29·73 crores less. Not that European management cannot economise: the General Manager in the N. S. Railway throughout the post-purchase period has been a European, but his policy and programme have been inspired by Indian Finance Members.

Hyderabad Railway Policy

The Rt. Hon'ble Sir Akbar Hydari had his eyes not only on direct monetary returns but also on the wider issues involved in a policy of State ownership and management of railways. When the Railway was purchased in 1930, he said:

" The prospects of being in a position to ensure effectively the wellbeing and contentment of all the workers on the Railway with due regard to the claims of the general tax-payer and of the travelling and trading public, has been the governing consideration of the Nizam's Government in purchasing from the private company the ownership of the Railways passing through the State, as much as any calculation of direct financial gain by the transaction."

Transport Co-ordination

The result of the policy of co-ordinating rail, road and air are seen from the figures given in the report for 1939-40:

" The N. S. Ry. Road Transport Services realised gross earnings of Rs. 29·6 lakhs which are a record, being Rs. 0·9 lakh more than those of the previous year. The working expenses decreased by Rs. 1·9 lakhs compared with the previous year, and the net earnings increased by Rs. 2·8 lakhs. The route mileage operated by these Services slightly increased during the year from 4069 to 4082. The number of passengers carried was 12 million. The weight carried by the N. S. Ry. Goods Road Transport Services increased by 14 per cent to 60,000 tons."

Maps are supplied along with time tables for the benefit of passengers, and rail-cum-road excursions are arranged during the excursion season so that more and more of the public may realise the facilities offered by the R.M.T.S. During 1939-40, the capital outlay on the Road Services was B. G. Rs. 57 lakhs. The R.M.T.S. Depreciation Fund had accumulated to B. G. Rs. 29·24 lakhs. That is, in about 7 years' working, in spite of rapid expansion, the Road Services had developed a Depreciation Fund constituting more than 50 per cent of the capital outlay during the seventh year. All possible care has been taken

to accommodate the ex-services on roads by purchasing their vehicles and employing their drivers.

" The lighting equipment and the extensions to the Aerodrome at Begumpet were completed during the year. This Aerodrome can now be ranked among the best in India. The work of levelling the sites for the landing grounds at Aurangabad and Adilabad is in progress. The Hyderabad-Bangalore-Madras route was surveyed and a bi-weekly service on this route commenced from the 9th April, 1940."

Hyderabad Railway Contributions

The concrete help given by the Hyderabad Railways to general finances is acknowledged by the Rt. Hon'ble Sir Akbar Hydari in almost every one of his later Budget Notes, from which the following are extracted:

" Although the accumulations of our surpluses during the current triennium for expenditure in the next contract period might be comparatively small, a new source will emerge to strengthen our resources when the purchase price of the Railway will have been entirely paid off through our Railway Purchase Reserve in 1343 (1934), which will give a net increase to our revenues of at least half a crore a year."

" A good deal of this activity would have been impossible had not the State Budget received material help from the purchase of the Railway from which the State received on an average about 20 lakhs a year in the quinquennial period 1316 to 1320 (1907—1911) but which is now yielding 108 lakhs a year. The purchase was effected by constituting a Railway Purchase Reserve in 1922 to enable the Government to purchase the Railway from the Company without any loan."

"British" versus Hyderabad Finance

Cautious forecasts, vigilant checks, timely economy, a steady pace in "building" and in " spending," close co-ordination, foresighted negotiation, continued and consistent policy—these have been responsible for the present very satisfactory position of Hyderabad Finances. If only Hyderabad had been given more co-operation by the Government of India, her financial achievements would have been

more remarkable still. The 1902 Treaty secured Masulipatam as a free port for Hyderabad ships and trade, and no customs duty was to be levied by the contracting parties on goods not breaking bulk in their respective jurisdictions. On both these treaty rights, the unilateral interpretation is being advanced that a clause either not used at all or long in disuse does not continue to be operative. In one frontier district, British currency circulates while the Hyderabad currency is legal tender. This anomalous state of affairs hits the poor cultivator hard, and in spite of all that is being done by the Hyderabad Government in order to make availabe the local currency for the payment of land revenue, etc., it is an admitted fact that the poorer classes stand to lose considerably on account of the persistence of the British currency in Hyderabad area. Against representations, a para in some correspondence is held up, and the Hyderabad Government is in consequence unable to insist on the use of Hyderabad currency only, within their own jurisdiction. The civil and criminal jurisdiction has been handed over to the Travancore Government by the Government of India on railways in that State, but Hyderabad (although the Premier State) has yet to get that jurisdiction, the ostensible excuse for the delay being that Hyderabad is in the midst of British territory whereas Travancore is in a corner. This reservation of jurisdiction has its financial as well as political aspects as this means so much less employment to Hyderabad Police, lawyers and courts, and so much inconvenience and annoyance to the general public. The Hyderabad Government does not get any remuneration or royalty on the Raichur-Sholapur Section: one does not know (nor is information available) whether it is open to the Hyderabad Government to purchase that section running through Hyderabad territory. As matters are, although O.S. currency is the coin of the land, the G. I. P. Ry. stations on the Raichur-Sholapur Section do not accept this currency (while the N. S. R. stations this side of Wadi do not accept B. G. currency except at Hyderabad and Secunderabad), and the result is that practically every one of the Hyderabad people in that area has got to carry two purses always, one B. G. and another O. S. There have been instances in other

States of State trains or rail cars running on lines worked by foreign agencies in the State, for a remuneration, but we have as yet no such instance in Hyderabad. The new rail cars go up to Wadi and not beyond, whereas it stands to reason that no distinction should be made by the N. S. Ry. between Hyderabadees this side of Wadi and that side, and these rail cars should run through to the last railway stations on the Raichur-Sholapur Section within Hyderabad frontiers. Hyderabad postal rates and Mysore railway fares are lower than British Indian charges. Although Hyderabad has been according many rights and facilities to British post within the State through Nizam's post offices, the British Indian Postal authorities have not thought it fit to grant reciprocal facilities, and the relations between the two sets of post offices within the State are so maladjusted that oftentimes the British post office collects "not paid" charges on letters stamped with Hyderabad stamps, and *vice versa*. Sometimes, letters with British stamps posted in British post offices are transferred to the Nizam's post offices for delivery (as delivery rights of the British post offices are restricted) and the Hyderabad post offices levy "not paid" charges because Hyderabad postal delivery was available for such letters and yet the parties used British stamps and posted in British post boxes. Letters from outside the State although transferred to the Nizam's post offices for delivery are not charged "not paid" but delivered free. On account of the insistence of jurisdiction by the Government of India, the Hyderabad Government have suspended the policy of ramifying the Dominions with an adequate number of telegraph offices. The local telephone system is spreading, but for business and commercial communication among the bulk of the community over long distances, the telephone cannot serve as well as the telegraph, and the effect of all this on the industry and trade of the State is very reactionary. The Hyderabad Government is not allowed to adjust their protective tariff suiting local needs and conditions, in view of the 5 per cent maximum contained in the Treaty, although a 15 per cent import duty was allowed for some time on silver and so far as common salt is concerned, Hyderabad has been allowed to levy an import duty up to 50 per cent. In the name of

reason, such a discretion ought to have been afforded in the case of industries for which Hyderabad has magnificent natural facilities.

Conclusion

In spite of these and similar difficulties and obstacles, Mysore has developed into the Sweden of India and Hyderabad into the U. S. A. of India (so far as financial prestige is concerned, but without the American deficits). Ultimately, these different results realised in these two premier sister States on the one hand, and the crumblings and collapses experienced in British India on the other, have to be traced to the fact that in these States, Finance has been managed and controlled by Indians, and in British India Finance has been managed by British interests. Values differ considerably of same goods or services even between husband and wife and it is no wonder that the "good of India" is being interpreted differently by Britishers in India and in England, and by Indians themselves. The rarest of statesmanship is humanism, but British Finance in India has been humanistic more in the sense of predominant consciousness of self-interest than of occasional sympathy for its Dependency.

The moral is simple. Anything like one nation guardianising the economic interests of another has no illustration either in history or in the contemporary world: the British use of Indian resources in peace as well as in war for their benefit is quite understandable, but what cannot be swallowed is the British claim that they have been the best saviours of the country's economy. The few but crucial instances described in this Paper establish the thesis that men like Sir M. Visvesvaraya, Sir Akbar Hydari and Sir Mirza M. Ismail have been worthy custodians of national economic interests, although on a smaller scale within their own spheres of activity. And this in spite of numerous obstacles from Simla or Whitehall. It is indeed extraordinary that no Indian has been yet thought fit to hold the Finance portfolio with the Government of India. The financial structure, policy and programme which have brought Hyderabad and Mysore to their present bright con-

dition, specially the *constant care* with which the finances have been controlled and guided, deserve to be better known, understood and studied in other parts of the country.

If for nothing else, at least for winning the war and safeguarding the Empire in the East in the future, "British" Finance in India will do wisely to make use of some of these veterans and their successful experience in Indian States, in assembling properly factors of production in the country that have been ignored, unutilised or improperly used: disorganisation has been and is the most conspicuous feature of Indian economy. If we did not cast our "golden bullets" forthwith in adequate quantity (by raising production, employment, and consumption *within the country* to a reasonable standard), the slump *after the War* should be more terrible in consequences than *during the War*.

APPENDIX

Scheme of Departmentalization of Finances

The Executive Council has desired that in future, a note should be attached, as an enclosure to each Budget Note, explaining the Scheme of the Departmentalization of the Finances, on which the Hyderabad Budget is framed. In accordance with this desire the following note has been framed for the benefit of those who have not had an opportunity of reading the exposition of the scheme in previous Budget Notes.

The main ideas of this scheme were formulated in the following paragraphs, when Sir Akbar Hydari presented his first Budget Note for 1331 Fasli (1921-22) on appointment as Finance Member.

" I shall try to eliminate as far as possible, from the ordinary revenue and service expenditure of the State, purely temporary items of expenditure and especially those which should not genuinely be considered as such. For example, receipts on account of sale of funded investments like Government Promissory Notes might swell the cash

balance of the State, but being at the expense of our invested balances, their inclusion would distort a correct view of our revenue income. Similarly, the profits from Osmania Sicca coinage, which formerly used to be invested in a separate reserve (the Kaldar Reserve), cannot be depended upon as a regular source of income, and, cannot therefore be treated in the accounts as an ordinary source of revenue. On the other hand, meeting the whole of the famine expenditure as part of the ordinary expenditure of the year in which the famine, after a cycle of years, happens to occur, abnormally exaggerates the position, as regards expenditure, of that year.

Departmentalization of the Finances.

" One of the problems, to which the Financial Department proposes to address itself in the coming year, is the revision of the classification of the heads of receipts and disbursements in such a way as to exhibit each class in its true perspective and to earmark the different funded investments under separate reserves according to the sources from, or the objects for which they have been constituted. There is also another object in view in this revision and that is what I might call, the *Departmentalization of the Finances.* In a passage that has become classic, Sir John Strachey showed how before the provincialization of the finances in British India, it was the Province that cried the loudest, and not the one that deserved the most, that got the largest share from the common treasury of India ":—

" The local governments had no means of knowing the measure by which their annual demands upon the Government of India ought to be regulated. They had a purse to draw upon of unlimited, because unknown, depth. They saw on every side the necessity for improvements, and their constant and justifiable desire was to obtain for their own province and people as large a share as they could persuade the Government of India to give them out of the general revenues of the Empire. They found by experience that the less economy they practised and the more importunate their demands, the more likely they were to persuade the Government of India of the urgency of their requirements."

"Applying this analogy of the *Provinces* in British India to the different *departments* of this State, giving the most to

the department that cried the most was a policy which led to no practical difficulties when as ten or even five years ago, a surplus of over a crore or even a crore and a half out of a total revenue of between five and six crores was a normal feature of the State Budget. But this has become impossible now, when as will be observed I deal with the Budget figures for 1331 F., in detail, the highest receipt budget, that has so far been framed, is just sufficient to meet all the demands of expenditure to which the Government practically stands commited; and the policy, that suggests itself to me as the best at present for adoption, is to fix the total grant of each department for a number of years and give it a large measure of autonomy within that grant, subject of course, to such general restrictions as are necessary to avoid any undesirable developments or precedents, and subject also to a rigid and really effective audit. The department must carry out whatever measures of reform it might desire to institute within this grant. If it happens to have any proposals for capital expenditure, it must provide, within its grant, for the amount of interest by which the earnings of the project fall short of the interest charges, incurred by the State in financing it. If after such allocations of the ordinary income among the different departments and making due provision every year for the formation of specific reserves for such classes of expenditure as, like famine, come inevitably but after a cycle of years, there happens to be a surplus, it would be the happy privilege of the Finance Department to suggest how that surplus could be most profitably distributed, the first claim on it ordinarily being the department contributing to its creation and then of development departments like Education, Sanitation, Commerce, Industries, Irrigation, and Communications, that promote the mental, physical and economic efficiency of the people. Until, however, such a surplus is actually in the coffers of the State, the Members in charge would be trusted to see that the expenditure is kept from year to year within the grants fixed for them for a definite period." The Scheme was sanctioned in 1331 F. and the following gives the latest version of the rules as passed by the Executive Council of His Exalted Highness the Nizam's Government and subsequently amended.

I. The grants allotted to each department shall be fixed for three years beginning from 1332 Fâsli provided that—

(*a*) if any particularly adverse conditions like famine or severe scarcity arise, they will be liable to curtailment,

(*b*) if there is any increase at the end of the year over the Normal Receipts, the excess will be distributed by additional allotments to the different departments in such a way as Government may decide.

Post Office and Departments under "F" Administration.

II. Each of the spending departments noted in the margin will be entitled to spend in addition to its normal grant any increase in its Receipts and the proceeds of any cess, etc., that may be imposed lawfully for the service of that department.

III. A department may be given in special circumstances a special allotment for expenditure in advance, if the Government is satisfied that the Expenditure will be covered by a corresponding increase in the Receipts.

Printing, Electricity, Telephone, Industrial Concerns, Jail Industries, Stationery Depot.

IV. Each of the Commercial and quasi-Commercial departments mentioned in the margin shall have at its disposal:—

(*a*) its normal net grant, if any is fixed, and

(*b*) the Receipts earned by it, out of which it will have

(*i*) to defray all working expenses,

(*ii*) provide for suitable depreciation, and

(*iii*) pay to Government interest at 5 per cent on the total Capital-at-charge. From the balance left it will pay such profits to Government as the circumstances of the department permit.

V. Every expenditure will be subject to Budget provision. Expenditure in excess of the normal grant will be allowed either in the circumstances mentioned in Rule III or if the department has an equivalent amount of surplus balance at its credit brought over from the previous year. Expenditure sanctioned by His Exalted Highness without the department initiating the proposal will be chargeable to the savings of the department, but if there are not sufficient savings after providing for previous commitments, the department will be entitled to a corresponding addition to its normal grant in excess of budget provision.

VI. Percentage and scale charges payable under the rules on revenue collected, as also refunds, rebates, and remissions of excess collections shall not be subject to Budget provision.

VII. The savings from departmental grants shall be placed at the credit of the department concerned for expenditure during the years of the contract, and at the end of the third year, one-half of the amount of the unexpended surplus of each department will be carried forward to its credit for the next period of the contract but the savings by reduction under the following heads will lapse entirely to Government:—

1. Mansabs and special allowances.
2. Yomias, Mamuls (not conditional on performance of service).
3. Rusums.
4. Reductions under Irregular Troops.
5. Tahrir of Sarishtadars.
6. All sinecure allowances.

VIII. If any department desires an increase for its capital beyond the capital grant already sanctioned, it must provide within its grant, *i.e.*, from its receipts, for the amount of interest at 5 per cent on the whole capital inclusive of the old as well as the new capital claimed. This will be the first charge on its gross receipts.

IX. The charges under Salaries and allowances, Contingencies, and Supplies and Services, shall be regulated by the scales, rules and regulations in force from time to time.

X. The departments will have full powers of inter-appropriation of grants under Contingencies and Special Charges (Supplies and Services) excepting the grants mentioned in Rule VI. They will also have power to re-appropriate from Contingencies and Special Charges to Travelling Allowance and Tour Charges.

XI. The savings under Salaries and Personal Allowances on account of appointments unfilled shall not be appropriated for the creation of permanent appointments, but may be utilised for the payment of arrears of pay or temporary appointments not costing more than the amount. Permanent reduction in establishment below the cadre fixed by Government on the recommendation of the Salaries Commission can be appropriated for the creation of new appointments as well as for increase in contingencies, special charges and other improvements of the department.

XII. The allotments for Travelling Allowance and Tour Charges and also the provision for works under Forest, Buildings and Communications, Irrigation and Public Improvements and grants for Petty Construction and Repairs placed at the disposal of each department shall not be appropriated for salaries and contingencies except with the express approval of the Finance Department, which will be accorded only in very exceptional circumstances.

SUMMARY

Time there was when Hyderabad was thought to be the beelzebub and Mysore the milch cow, both at the command of the British Imperialist in India. Times have changed. In their own ways, both Hyderabad and Mysore have developed object-lessons of financial achievement. The keynote to the success of Hyderabad finances (dawning upon a long period of darkness and despair) lies in Sir Akbar Hydari's three-fold scheme of re-classification of heads of revenue and expenditure differentiating as amongst administrative, development and commercial deparments, re-organisa-

tion of reserves enabling the Government to meet the bulk of capital outlay and famine relief expenditure from accumulated savings of previous years, and Departmentalisation ensuring a certain amount of autonomy to departments and concomitant economy—all tending to serve as a set of shock absorbers: the success of Hyderabad Railway Finance is unique: her "building" programme is gigantic: with slight adaptation, what has been said of the U.S.A. monetary system could be claimed for the Hyderabad financial system: "Thus evolved, the new Hyderabad financial machine . . . with throttles and brakes, with high, low and reverse gears, differs considerably from the old financial horse and buggy contraption." Mysore has attained her eminence through the broadcasting of cheap power and irrigation, through Government and Government-aided industries making appropriate use of her special natural resources, and through wise taxation. Both have secured substantial advance in spite of numerous impediments countenanced by the Imperial Government. In strong contrast to the success achieved by these two premier sister Indian States, stand the staggering expenses in British India on administration in general and the increase in the number of high-paid and sinecure appointments in particular, the crumbling of railway finances, the evaporation of the Niemeyer Award, and the do-nothing policy (comparatively speaking) with regard to a cumulative mobilisation of agricultural and industrial resources. Indeed, in many financial aspects, Hyderabad takes after the U.S.A. and Mysore after Sweden. That some Indian States are backward in certain respects, that there is still vast scope for improvement even in these two States, and that the scale of operations is inevitably smaller than in British India, goes without saying it. But the purpose of this Paper is to explain by taking a few illustrations, that in matters of Finance, "Indian" finance in Hyderabad and in Mysore has fared much better than "British" finance in British India. And even today, these States are under a greater handicap than Provincial Governments on account of the rule of thumb still being current coin at Whitehall so far as Indian State economic matters are concerned.*

* The Hyderabad and Mysore Governments are not responsible for views contained in this Paper.

PUBLIC DEBTS IN THE U. P. 1921—37

BY

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The total indebtedness of the U. P. amounted to Rs. 15,16,09,000 on the 1st of April, 1921, when the Montford Reforms were introduced. The following table shows the growth of indebtedness year after year since 1921 :*

In Thousands of Rupees

Year.	Total at the beginning of the year.	Total at the close of the year.	Interest paid.
1921-22	1,51,609	1,91,001	5,749
1922-23	1,91,001	1,88,557	7,631
1923-24	1,88,557	1,96,447	7,800
1924-25	1,96,447	2,08,829	8,339
1925-26	2,08,829	2,26,282	9,475
1926-27	2,26,282	2,46,360	10,993
1927-28	2,46,360	2,56,535	11,204
1928-29	2,56,535	2,95,191	12,538
1929-30	2,95,191	3,06,008	14,010
1930-31	3,06,008	3,19,172	14,613
1931-32	3,19,172	3,32,026	15,459
1932-33	3,32,026	3,12,952	16,156
1933-34	3,12,952	3,13,798[1]	14,536
1934-35	3,13,798	3,16,556[2]	13,926
1935-36	3,16,556	3,23,780[3]	13,811
1936-37	3,23,780	3,04,019[4]	13,845

* Appendix 8, Govt. of U.P., Historical Account of Provincial Finances 1921—37.

[1] Less 14 Lakhs in Sinking Fund.
[2] Less 28 Lakhs in Sinking Fund.
[3] Less 12 Lakhs in Sinking Fund.
[4] Less 61 Lakhs in Sinking Fund.

Pre-Reform Indebtedness.

Pre-Reform Debts, *i.e.*, a total amount of Rs. 15,16,09,000 were taken over by the Province as a result of the Financial Settlement made under the Reforms introduced in 1921.

There were two kinds of these debts:

(a) Loans had been borrowed for capital outlay on irrigation works, productive and unproductive, from time to time. Indebtedness on this account stood at Rs. 12,19,46,000 *in 1921, and the Province was quite justifiably asked to assume responsibility for this amount.* These loans were more or less permanent and could be repaid at option.

(b) The Province had also been borrowing money from the Government of India for giving Takavi Loans and advances to Local bodies, Rs. 2,96,63,000 were recoverable from the Province on the 1st April, 1921. This amount was turned into a debt owed by the Provincial Government to the Government of India and was to be repaid in 12 years beginning from 1921-22.

The Government of U. P. paid Rs. 25½ lakhs in 1921-22 towards the extinction of this debt. Further payments of Rs. 25 lakhs annually were paid year after year, thereafter, till the entire debt was paid off in 1932-33 with a payment of Rs. 21,13,000.

All the money was, however, borrowed from the Government of India since previous to 1921 the Provincial Government did not enjoy any power of borrowing in the open market The debts again were mostly productive and did not impose any undue strain on the tax-payers.

Post-Reform Debts.

The Reforms of 1921 introduced an important change so far as this power was concerned. With certain limitations Provinces were given the power to raise loans in open market although a Provincial loans fund was also maintained by the Government of India.

Both the sources have been tapped by the Provincial Government for raising the required funds and the Post-

Reform debts of the U. P. consist of some loans raised in the open market, and sums borrowed from the Provincial loans fund for various purposes.

Loans from Provincial Loans Fund.

Advances from the Provincial loans fund of the Government of India have been taken both for productive and unproductive purposes. Among the productive purposes for which loans have been borrowed from this Fund were (i) Sarda Canal and Hydro-Electric Schemes, (ii) Loans to local bodies—Municipalities, District Boards, etc., and (iii) Takavi loans to the Agriculturists.

Unproductive advances had to be taken for meeting emergent expenditure which could not be avoided without detriment to public interest. They were taken for (a) Repairs to canals damaged by the floods of 1924-25, (b) Other repairs due to the same reasons, (c) Police, Revenue and Judicial buildings, (d) Agricultural college, (e) Council Chamber, (f) Sewage project of Lucknow, (g) Maternity Hospital of Lucknow, (h) Commutation of pensions, and (i) Funding of Annual deficits.

Unproductive advances for flood damages, police buildings and roads were repayable in 50 years. In other cases the period was fixed at 25 years except for commutation of pensions and funding the Annual deficits for which the period of repayment was 15 years.

Productive debts had to be paid in 80 years. Takavi advances of Rs. 120 lakhs in 1928-29 and Rs. 70 lakhs in 1929 30 were, however, subject to special conditions; other Takavi loans were to be paid back in 5 years.

The Government of U. P., however, decided to pay back advances taken for giving loans to local bodies within 25 years as the money is usually paid back to them by these bodies within the same period.

Loans in Open Market.

In addition to the advances taken from the Provincial Loans Fund a few loans have also been raised in the open market since 1921.

1921-22.

In 1921-22 the Provincial Government raised Rs. 4,19,99,000 in the open market for Sarda Canal and other Capital Expenditure. Bonds were issued at 93 at 6 per cent free of income-tax. Bond-holders had the option of obtaining repayment at par up to the amount in the Sinking Fund less 5 lakhs for depreciation in any year after 1926-27. The Government had the option of repaying the entire debt between 1931—41.

To extinguish the debt the Province had to allot 3 lakhs annually for the first 5 years, thereafter, 1/15 of the amount uncovered. In 1927-28 the allotment rose to Rs. 26,25,000. The sum in the Sinking Fund was invested in Central Government Securities and the interest thereon was similarly invested. The Sinking Fund allotment was thus considerably decreased year after year and in 1932-33 stood at Rs. 19,00,000.

Part of the funds were used for the purpose for which they were raised only in 1921-22 and 1922-23. After that, however, little expenditure was incurred for these objects as the province faced deficits year after year which were covered by the sums available in this account.

1932-33.

It has been mentioned above that the Government had the right to repay the loan in any year between 1931 and 1941. Annual charges proved to be heavy. In fact the Sinking Fund and Income-tax charges in 1931—33 amounted to Rs. 48 lakhs. As conditions in the money market were very favourable the Government decided to raise another loan for paying off the old one.

A new loan of about $2\frac{1}{2}$ crores was floated and the securities held in the Sinking Fund were sold. The new loan brought Rs. 2,50,15,000 and securities were sold for Rs. 1,75,43,000. So a total of Rs. 4,25,58,000 was available for the 1921 loan which amounted to only Rs. 4,16,42,000 in 1932-33.

The new loan known as U. P. Loan, 1944, was issued at 97 at 5 per cent. For repayment the Government was to

set apart 14 lakhs in the 1st 3 years, 19 lakhs in the next three and in the last six years 1/6 of the loan less the previous allotment. The sum in the Sinking Fund is invested in Government Securities but the interest on these securities is credited to the Revenue account.

The new loan brought a saving of Rs. 20 lakhs to the Government.

1936.

In the year 1936-37 the Government of India declared their intention to close the Provincial Loans Fund from the 31st March, 1937. Hence forward the Provinces were to finance themselves from Loans raised in the open market. They were willing to give a loan to the Provinces for a year to be repaid in 1937-38. Conditions being favourable the Government of U. P. decided to float a loan in the open market rather than take a loan for such a short period from the Government. A loan was floated on 15th September, 1936, and is known as U. P. Loan 1961—66. It was issued at par at 3 per cent. It can be repaid any time between 1961—66. Rs. 2 crores were issued for but it was heavily over-subscribed. The money was to be used for Hydro-electric and tube-well schemes and for advances to local bodies and Takavi.

The Government set apart each year $1\frac{1}{4}$ per cent of the total amount, *i.e.*, $2\frac{1}{2}$ lakhs for purchasing currency notes for cancelling the loan when the market price falls below par.

The introduction of Provincial autonomy in 1937 brought about further changes in the Finances of the Provinces. Until the close of 1936-37 only one Provincial account was maintained by the Government of India, accounts of the provinces being kept within this account. All cash in the Treasuries belonged to the Central Government and there was only one account with the Reserve Bank. After the introduction of provincial autonomy it became necessary to separate the balances of each Province from the joint account.

There were two classes of these balances. One consisted of old provincial closing balances amounting to Rs. 27,09,000 made up as follows:—

			(In Thousands of Rupees) Debit	Credit
1.	Government Account	...	3,17,942	...
2.	Permanent Debt	...	...	46,313
3.	Famine Relief Fund	...	13	...
4.	Depreciation Reserve Fund Government Press	...	...	164
5.	Irrigation Dept. Res. Fund	...	...	407
6	Sinking Fund Deposits	...	6,100	6,100
7.	Subvention of Central Road Development Account	...	...	156
8.	Grant by Central Government for Development of Industries		...	116
9	Grant for Sugar Excise Fund	...	...	537
10.	Grant for Economic Development of Rural Areas	...	...	893
11	Suspense Account	...	600	...
12.	Provincial Road Fund	...	...	1,155
13.	Loans and Advances by Provincial Government	...	23,170	...
14.	Advance from Provincial Loan Fund	...	...	2,94,693
	Net Credit		...	2,709

The other consisted of those items for which responsibility had to be assumed by the Province when the Provincial Account was separated. The items for which the Provincial Government was made responsible were:

(a) Special loans from King Nasiruddin Haider of Oudh in respect of which interest at 4 per cent on 3 lakhs has to be paid to be used for charitable purposes and from Raja Kali Shanker Ghoshal for which the Government had undertaken to pay 200 p.m. to an Asylum for the blind. Total responsibility in respect of special loans which was

transferred to the Province amounted to Rs. 3,48,000 on 31st March, 1937.

(b) Provident fund deposits of the Government servants under the administrative control of the Province. The total amounted to Rs. 3,01,49,000 in 1937.

(c) Deposits of Local funds with Government treasuries amounting to Rs. 46,01,000.

(d) Civil deposits consisting of deposits in Civil, Revenue and Criminal Courts amounting to Rs. 90,25,000.

(e) Suspense account not bookable under any other head of account amounting to Rs. 7,000.

(f) Loans to Government servants. Amounts advanced by the Government of India were considered as sums due to the Government of India from the province. The amount in this respect came to Rs. 10,82,000.

(g) Advances payable by Government servants to the Government of India amounting to Rs. 3,68,000.

(h) Permanent advances, *e.g.*, imprests amounting to Rs. 1,42,000.

(i) Accounts with Foreign Governments amounting to Rs. 13,000; and

(j) Departmental balances to the extent of Rs. 38,000.

Items (f to i) are, however, assets to the Provincial Government.

The net new liability, thus, which came to the Province as a result of the separation of the balances amounted to Rs. 4,24,87,000.

The Government of India should have placed at the disposal of the Provincial Government an equivalent sum. Only Rs. 55,00,000 were, however, given in the shape of cash balances in the treasuries and the rest, *i.e.*, Rs. 3,69,87,000 were taken as capital repayments towards the outstanding debt of the Province to the Government of India.

The remaining debt was consolidated into a single debt at 4 per cent. The total debt, thus, including the net liabilities freshly incurred stood at Rs. 34,04,00,000 at the end of year 1936-37. If we deduct from this amount sums due

to the Provincial Government from Local bodies and landlords, etc., and sums in the Government treasuries, we get a total net liability of Rs. 30,90,00,000 with which the Province started at the dawn of Provincial Autonomy.

Corresponding to the Provincial debts there are the remunerative canals, Tube-wells. the Hydro-electric system, various buildings, roads etc. whose value it is very difficult to estimate.

The capital outlay from 1921-22 to 1936-37 including that made before 1921-22 has been as follows:—

		Thousands Rs.
1.	Irrigation including Hydel Prod. ...	2,40,350
	„ „ „ unprod.	24,972
2.	Forest ...	569
3.	Public Health ...	552
4.	Industrial Development ...	731
5.	Agricultural Improvement ...	404
6.	Civil Works ...	39 460
7.	Commuted Value of Pensions ...	5,810
8.	Loans to Local Bodies ...	24,254

An examination of the items on which the Government of the Province has been charging expenditure to capital reveals that the unproductive debts of the province are very small as compared to productive debts for the same period. Even the unproductive portion of the Public debts has been incurred for purposes which were necessary and beneficial to the people of the province. One only wonders if a part of the considerable amount spent on civil works could not be avoided and the sum diverted to some other purposes more beneficial to the people. It must be said, however, that the Government have managed the finances of the Province very well indeed.

The following table will show how far the Government have been successful in handling capital expenditure in the Province:—

In thousands of Rupees

Year.	Total Receipts from interest Capital works including Civil Works.	Total Expenditure including Interest paid and Sinking Fund Charges.
1921-22	11,282	8,742
1922-23	11,345	8,133
1923-24	12,167	8,308
1924-25	9,087	9,004
1925-26	10,217	9,973
1926-27	11,251	11,478
1927-28	11,348	14,040
1928-29	9,873	15,104
1929-30	14,745	16,368
1930-31	12,802	19,297
1931-32	11,363	18,318
1932-33	14,544	19,002
1933-34	13,633	15,727
1934-35	12,582	15,060
1935-36	17,170	14,948
1936-37	16,918	16,841

Total Expenditure on capital works exceeds receipts in the years from 1926-27 to 1934-35. In the remaining years under review, the Government have managed to get a surplus over their expenditure on Capital works. Excess expenditure over receipts has not been, however, due to any miscalculation as to the nature of works undertaken by the Government. As the following table will show, productive

works are really productive and have yielded a surplus in most years:—

Year.	Total Receipts from irrigation.	Total Expenditure including interest.	Deficit surplus.	Per cent of return.
1921-22	14,582	10,503	+4,079	2·6
1922-23	13,931	10,666	+3,265	1·9
1923-24	15,199	11,236	+3,963	2·2
1924-25	11,715	11,671	+44	0·0
1925-26	13,787	12,909	+878	0·4
1926-27	16,305	14,414	+1,891	0·8
1927-28	16,489	15,426	+1,063	0·4
1928-29	14,808	16,902	—2 094	—0·8
1929-30	20,631	17,376	+3,255	1·1
1930-31	19,777	19,202	+575	0·2
1931-32	17,662	18,573	—911	—0·3
1932-33	21,098	19,065	+2,033	0·6
1933-34	20,548	19,335	+1,213	0·4
1934-35	19,632	19,505	+127	0·0
1935-36	24,210	19,566	+4,704	1·3
1936-37	25,094	20,590	+4,601	1·2

In this connection it must also be pointed out that Sarda Canal is still unproductive and the tube wells are being run at a loss. Hydel too became productive only after 1934. Even then except in the years 1928-29 and 1931-32 after paying all the expenses including interest on the Capital invested, the works have yielded a net income to the Government. When the Sarda Canal becomes productive, as it is bound to be in near future and when the Tube wells are a paying concern considerable sums will be available from the productive works to meet the liabilities in respect of unproductive capital outlay on works which were necessary for the welfare of the people. It was such works which led to an excess of expenditure over receipts during 1926-27 to 1934-35.

The financial position of the Province thus is very sound and the Government deserve to be congratulated on the successful management of the finances. There is no ground whatsoever, for the hesitation shown by the people in subscribing to a loan floated by the Government some time back.

FINANCES OF THE MADRAS PROVINCE, 1920—40

BY

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According to the devolution rules framed under the Government of India Act of 1919, from the 1st of April, 1921 the Madras Government made an annual contribution of Rs. 345 lakhs to the Central Revenues. This it continued to do up to 1925 when the contribution was reduced to Rs. 221·98 lakhs. Next year, 1926-27, it fell to Rs. 165·19 lakhs and was wholly abolished in 1927-28.

Simultaneously with the reduction and final abolition of the contribution to the Central Revenues there was a steady and gradual improvement in the receipts from the revenue assigned to the Madras Government. This improvement reached its apex in 1929-30; from which year it began to decline as a result of the world economic depression. With the expansion of revenue expenditure also increased; but owing to the fall in revenue from 1930-31 expenditure had to be drastically cut down.

Year.	Revenue.	Expenditure on revenue account.	Surplus (+) or Deficit (−) [Column (2)—Column (3)]
(1)	(2)	(3)	(4)
1920-21	16,19·71	14,79·60	+1,40·11
1921-22	15,79·20	16,77·92	− 98·72
1922-23	16,06·22	16,09·24	− 3·02
1923-24	16,47·85	16,11·54	+ 36·31
1924-25	16,27·59	16,57·06	− 29·47
1925-26	16,93·60	16,95·23	+ 98·37
1926-27	16,83·69	15,82·21	+1,01·48
1927-28	17,05·37	15,03·64	+2,01·73
1928-29	17,53·10	16,13·96	+1,39·14
1929-30	18,08·88	16,84·79	+1,24·09
1930-31	16,83·93	17,89·68	−1,05·75
1931-32	16,29·88	16,24·47	+ 5·41
1932-33	16,40·24	15,63·03	+ 77·21
1933-34	15,50·28	15,44·03	+ 6·25
1934-35	15,62·60	15,51·67	+ 10·93
1935-36	15,88·25	15,83·40	+ 4·85
1935-36 (Madras only)	15,57·66	15,31·03	+ 26·63
1936-37	15,58·04	15,77·37	− 19·33

The above figures show that there were surpluses in eleven years. and deficits in five years. While the surpluses in the early years were due to retrenchment, the surpluses in the later years were due to remissions of the provincial contributions. The surplus of 1931-32 was due to an unexpected increase in the yield from the excise and stamp revenues. The deficit in 1921-22 was mainly due to the Non-co-operation Movement, the Moplah Rebellion, the famine in the Ceded Districts, the general trade depression and the increase in salaries. The total net surplus for the sixteen years was 549·48 lakhs. Out of these, 3 crores were utilized for paying off loans from the Central Government and the remainder for capital expenditure mostly productive.

The table (on the next page) shows that land revenue receipts were very high in 1925-26 and 1931-32. Revenue from excise fluctuated during the period. It was at its lowest point in 1921-22 and touched the highest in 1929-30. Since then it has declined substantially. The fall in 1921-22 was undoubtedly due to the Non-co-operation Movement while the subsequent decline is probably due to economic depression and the increase of illicit practices. The increase in the stamp revenue was due to the amendment of the Court Fees and Stamps Act and the enhancement of the price of the copy stamp paper. At the same time it must be remembered that stamp revenue has shown a tendency to decline due to economic depression and the measures taken to mitigate agricultural indebtedness by the grant of Government loans and also because of the establishment of Land Mortgage Banks and Debt Conciliation Boards. Forest revenue reached the peak point in 1929-30 and ever since has been fluctuating. Since 1928-29 there has been a fall in registration revenue.

The following table gives the figures of revenue under the various heads of account :—

Year.	Land Revenue.	Excise.	Stamps.	Forest.	Registration.	Other Heads.	Total.
1920-21	6,87·04	5,45·80	1,78·10	48·68	30·61	96·86	15,87·09
1921-22	7,24·45	4,97·37	1,89·85	44·80	32·56	99·72	15,88·75
1922-23	7,28·35	5,01·31	2,19·84	47 89	35·98	1,00·67	16,34·04
1923-24	7,12·78	5,32·10	2,34·05	48·98	36·86	1,12·52	16,77·29
1924-25	7,40·20	5,02·99	2,41·51	51·19	37·90	1,03·46	16,77·25
1925-26	7,70·70	4,94·35	2,45 08	51·29	38·60	1,14·92	17,14 94
1926-27	7,54·32	5,10·14	2,52·30	54·98	40·53	1,16·81	17,29·08
1927-28	7,54·35	5,34·37	2,50·11	53·44	39·06	1,25·63	17,56·96
1928-29	7,50·31	5,58·75	2,51·17	61·54	34·12	1,41·30	17,97·19
1929-30	7,50·41	5,92·25	2,50·92	63·54	34·48	1,55·46	18,47·06
1930-31	7,16·59	5,28·37	2,34·71	51·16	30·37	1,51·85	17,13·05
1931-32	7,69·38	4,28·99	2,34·93	45·29	29·79	1,22·52	16,30·90
1932-33	7,46·84	4,31·69	2,41·58	49·68	32·47	1,21·23	16,23·49
1933-34	6,92·54	4,29·59	2,28·11	41·55	30·28	1,27·15	15,49·22
1934-35	7,16·51	4,24·55	2,17·11	44·31	31·06	1,32·27	15,65·81
1935-36	7,42·39	4,11·93	2,08·18	44·95	30·30	1,37·34	15 75·09
1935-36 (Madras only)	7,30·52	4,00·36	2,04·45	43·53	29·79	1,35·00	15,43·65
1936-37	7,15·44	4,00·79	1,95·08	48·27	29·95	1,55·04	15,44·57

Turning to expenditure the following table gives the figures for expenditure during the period under review:—

Year.	Total.	Transferred departments and Development Services included in Reserved	Charges common to Reserved and Transferred departments.	Reserved departments. (Security Services and other minor departments).
1920-21	11,75·85	5,09 60	92·78	5,73·47
1921-22	13,11·54	5,86·86	93·42	6,31·26
1922-23	12,98·83	5,62·32	1,09·36	6,27·15
1923-24	13,21·66	5,76·64	1,20·85	6,24·17
1924-25	13,56·95	6,07·84	1,32·16	6,16·95
1925-26	14,22·97	6,63·33	1,49·19	6,10·45
1926-27	14,85·21	7,05·77	1,75·65	6,03·79
1927-28	15,82·57	7,75 82	1,88·28	6,18·47
1928-29	16,59·58	8,50·26	1,93·93	6,15·39
1929-30	17,26·42	9,08·12	1,87·96	6,30·34
1930-31	18,15·07	9,88·07	1,82·48	6,44·52
1931-32	16,26·58	8,34·78	1,83·61	6,08·19
1932-33	15,22·50	7,56·12	1,89·79	5,76·59
1933-34	15,48·97	7,70·60	1,95·58	5,82·70
1934-35	15,54·34	7,67·74	1,94·07	5,92·53
1935-36	15,85·81	7,89·64	2,00·80	5,95·37
1935-36 (Madras only)	15,32·59	7,61·42	1,97·91	5,73·26
1936-37	15,77 09	7,97·57	2,00·10	5,79·42

In 1930-31 the total expenditure was 18,15·07 lakhs of rupees. The expenditure on transferred departments and development services had increased that year by 94% as compared to 1920-21 and that on security services and minor departments by 12%.

According to the Government of India Act of 1919 the Provincial Governments were empowered to raise loans on the security of the revenues allotted to them. On the 1st April 1921 the Government of India debited to the Madras Government 8,75·26 lakhs of rupees. This represented the capital expenses incurred by the Government of India up to 1921 for constructing protective and productive irrigation works in the Madras Presidency. The Government of India were only entitled to interest at a fixed rate on this amount but at the same time the option of amortizing the debt was given to Madras. In 1936 the Madras Government debited Rs. 47·07 lakhs to the Orissa Government. In 1937 the outstanding debt of the Madras Government to the Central Government was 8,28·19 lakhs. The annual interest on this amount was 28·12 lakhs. In addition to this debt the Government of India had debited to the Madras Government a sum of Rs. 108·86 lakhs. This represented loans which the Government of India had advanced to local authorities and cultivators. The Madras Government repaid this debt to the Central Government in twelve annual instalments; and it was finally cleared off in 1932-33.

According to Part III of the Government of India Act, 1935, the scheme for the decentralization of balances came into effect on 1st April 1937. Along with this there was a consolidation of the debt owed by the Madras Government to the Central Government. At the same time the Government of India held 771·75 lakhs of deposits of various kinds which they had to repay to certain provincial bodies in Madras. The Madras Government took up this liability in return for adjustment by way of reduction of its pre-1921 debt to the Central Government. By this method the pre-1921 debt got reduced to 56·44 lakhs. After this adjustment the total amount owed by the Madras Government to the Central Government was 756·71 lakhs which included the 56·44 lakhs of the pre-1921 debts. All this amount was consolidated into a single debt and the average rate of interest on this debt worked out at 4·71%. This debt was to be paid off within a period of 45 years commencing from 1937-38 and ending in 1981-82 with interest at the rate of 4·5%. The option of redeeming the debt earlier

was given to the Madras Government: an amount not exceeding one-half of the principal could be returned between 1st April, 1945 and 15th October, 1946 and the whole or any part of the remainder of the debt between 1st April, 1960 and 16th October, 1961. The net result of the consolidation was that the debt charges which stood at Rs. 87·67 lakhs under the old arrangement became reduced to Rs. 53·37 lakhs in 1937-38. At the same time the Provincial Government lost interest on about Rs. 55 lakhs on account of furnishing the minimum balance with the Reserve Bank, cash in treasuries and sub-treasuries and of financing all the floating debts. Another fact that has to be mentioned here is that the Madras Government has saved every year roughly 22 lakhs by the Separation of Orissa. On the whole Madras Finance was in a sound position at the advent of Provincial Autonomy. Compared with the opening balance on 1st April 1921 of 58·78 lakhs, on 31st March 1937 there was a revenue closing balance of 61·86 lakhs. Besides this the Madras Government had on the same date a closing balance of 63·89 lakhs composed of depreciation funds of commercial undertakings, deposits etc. Thus on the 31st March 1937 the total balance to the credit of the Madras Government was 125·75 lakhs apart from the securities held in the Madras Famine Relief Fund.*

With the advent of Provincial Autonomy in 1937 the functions of the Provincial Government were widened and the New Provincial Governments were eager to strengthen the social services even if that involved deficit budgets and the floatation of new loans. At the same time there was retrenchment in the more costly services and expansion in other directions. The new policy was to some extent handicapped by the lack of control of the Provincial Government over certain items of expenditure and by the lack of scope for further taxation in certain directions. Since further income from taxation was difficult to obtain expenditure had necessarily to be limited.

* All the figures and tables have been taken from Budget Memorandum 1939-40, Government of Madras, Finance Department.

Even before Provincial Autonomy expenditure in Madras had been fairly well directed, there was an increase of 27% in the Madras expenditure on social services when compared to the period before dyarchy. This cannot be said of any of the other major provinces. Consequently, the increase during the period of provincial autonomy in Madras was low as compared with other provinces; whereas absence of such increase in the dyarchic period resulted in showing a much higher percentage of increase during the period of provincial autonomy in other provinces. The following table shows the expenditure in Madras from 1937-38 to 1939-40.

Year.	Primary functions of Government.	Development Services.	Charges Common	Total.
1937—1938	6,60·26	7,90·80	1,31·90	15,82·96
1938—1939	6,51·92	8,33·65	1,35·19	16,20·76
1939—1940	6,60·63	8,46·34	1,33·75	16,40·72

Expenditure on the primary functions of government increased at the introduction of provincial autonomy. This is due to frequent meetings of the legislature, long sittings costing increased secretarial staff, and other constitutional changes including the bi-cameral system. The introduction of prohibition also involved additional expenditure. On the other hand, reorganization of departments and retrenchment of unnecessary posts and the stoppage of the hill exodus effected some savings. The net result was that expenditure on security services showed a slight fall.

Turning to development services we shall take up a few items for scrutiny. The following table shows the expenditure on education:—

1937—38	... ... 257·95	(Accounts)
1938—39	... ... 261·57	(Budget Estimate)
1938—39	... ... 262·51	(Revised Estimate)
1939—40	... ... 264·57	(Budget Estimate)

Though the figures show a rise as compared with previous years, compulsory primary education, though realised to be highly necessary, could not be introduced since it involved an expense of 6½ to 7½ crores. Expenditure on medical relief also shows a marked increase. Special attention was devoted to water-supply. Efforts were made to combat epidemic diseases and to distribute quinine and initiate anti-malarial measures. A sum of Rs. 1½ lakhs was set apart annually for this purpose. Between 1937—40 during a period of three years a sum of 18 lakhs of rupees has been spent on rural water-supply. In this matter Madras is second only to Bombay which has spent 28·25 lakhs. It is clear, therefore, that public health received special attention during the period of provincial autonomy.

Section 45-A (Rule 29 of the Devolution Rules and Schedule IV) of the Government of India Act, 1919, which came into force on 1st April, 1921 provided for the establishment and maintenance of a famine relief fund in Madras. The provincial revenue set apart for this purpose was 6·61 lakhs annually; this amount was reduced in 1928-29 to 3 lakhs. This sum was to be utilized for famine relief during the year; if there was an unspent balance it was to be added to the Famine Relief Fund. When, however, the Famine Relief Fund reached a maximum of 40 lakhs the provision of an annual amount for expenditure on famine relief was optional. This fund was regarded as invested with the Governor-General in Council who paid interest. On the 1st April, 1935, this fund reached the highest point, *viz.*, 61·53 lakhs and on 31st March 1936 it was 41·48 lakhs. The Government of India Act, 1935, did not provide for the continuance of the Famine Relief Fund; but the Madras Government passed the Madras Famine Relief Fund Act of 1936 by which it continued to maintain a famine relief fund with the balance to its credit with the Central Government on this head, as its nucleus.

During the period 1936-37 to 1939-40 there has been an increase in the revenue receipts of Madras. The following Table shows the revenue distributed over the important heads;—

Year.	1937-38.	1938-39 (Revised estimate).	1939-40 (Budget).
Taxes on income other than Corporation tax ...	18·75	22·95	24·15
Land Revenue and irrigation *minus* working expenses	6,80·66	6,87·90	7,04·70
Excise	4,03·07	3,68·34	3,55·04
Stamps	1,92·69	1,66·78	1,67·24
Forests	50·46	45·28	44·66
Registration	33·29	31·68	31·74
Motor Vehicles ...	53·95	80·60	82·91
Other Taxes and Duties ...	2·87	2·36	18·34
Electric Schemes *minus* working expenses ...	17·53	19·67	30·80
Other Heads	1,47·35	1,97·63	1,63·87
Total	16,00·62	16,23·19	16,23·45

There has been an increase in land revenue during the period; and this is in large measure due to favourable seasons and the collection of previous arrears. In the matter of excise which accounted for 25% of the total receipts there has been a decrease in the yield owing to the introduction of prohibition. It must at the same time be added that though there were no collections from the dry areas, the wet areas registered an increase in revenue. The receipt under stamps also showed a decline since measures for debt relief led to a fall in litigation. In 1938-39 grazing fees were reduced by 50% and there has been a consequent shrinkage in forest revenue.

At the same time new sources of revenue were tapped. First among them, in point of time, was the entertainment tax. This tax had already been introduced in Bengal as early as 1922 and therefore it was not new to the country. It had also been adopted in Bombay, Sind, Punjab, U. P. and C. P. before it came to Madras. For a long time it was a source of revenue for local bodies. In 1939 it was made a provincial item and the local bodies were compensated. Duties on electricity and motor spirit were also attempted.

A tax on tobacco was also levied. This tax had also been in existence in other provinces before Madras adopted it. Another measure of taxation was the Sale of Cloth Act, 1937. The latest measure introducing new taxation is the Madras General Sales Tax Act of 1939.

Coming to the loan policy of the Madras Government during the period of provincial autonomy one notes that the public debt of the province has increased. This has been the case in all provinces except Bombay and Sind. The debts of the Madras Government rose from 11·05 crores to 16·17 crores of rupees during the period.

A review of the revenue and expenditure of Madras during the past two decades shows that both the income and the expenditure of the Madras Government have increased during the period; but the increase in income has not kept pace with the increase in expenditure. The sources of revenue which have been assigned to the provinces by the Government of India Act, 1935, are inelastic; while the functions assigned to the Provincial Government demand much greater expenditure. To remedy this state of things it would be necessary for the Central Government to accelerate the remissions under Income Tax till at last that tax becomes entirely a provincial source of revenue. The income from forests can be substantially increased by a more scientific forest policy. Further retrenchment in expenditure is scarcely possible. The possibility of the state-running public utility concerns has to be explored. This province may attempt a monopoly of tobacco.

That there should be a substantial increase in expenditure on productive and nation-building undertakings cannot be doubted. Since increased taxes must be based only on increased taxable capacity of the people planned and concerted measures must be taken to improve the income of the people. Haphazard methods will never lead to any substantial improvement and hence a definite plan with a time-limit should be put into force. Money is needed for all this. And one method of securing further income is the introduction of new taxes. These taxes would involve a redistribution of the incidence of taxation.

The first step in this direction would be a scientific study of the working of existing taxes and the scope for new taxation. Taxes on succession would be a productive source of revenue. The present system of land revenue needs careful investigation and the possibility of tapping larger revenues from land has to be carefully considered. Specific taxes on trades and professions may also be attempted. Taxes on luxuries and advertisements as sources of revenue for local bodies may also be examined. Transit and octroi duties which have been suggested by some people should be avoided since that would involve further restraint on the free flow of goods within the country.

A popular government can never content itself with a policy of maintaining law and order. The motto of conservative financiers of taxing low and spending low must be discarded and within the bounds of solvent finance a bold and forward policy in regard to taxation, loans and expenditure has to be followed. This well-planned and co-ordinated policy must have as its aim the maximising of the agricultural and industrial production of the country and the improvement of the conditions in which the millions of the country live and labour from day to day. No higher task can await the future provincial finance ministers than the initiation and adoption of a sound and well-conceived economic policy which is calculated to banish from our country poverty, ignorance and disease. In the field of finance, as in other spheres of human activity, extreme conservatism may be only another name for stagnation; and a policy which appears risky and dangerous may prove in the long run to be the safest and most beneficial.

THE FINANCIAL SITUATION IN SIND

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In recent years Sind has made itself known by the assassinations which occur there and by being heels over head in debt to the Central Government. It is not intended, in this article, to establish any connection between these two features of this new province under the Provincial autonomy. But it is just these depressing features of economic and political life in Sind which have created doubts as to the wisdom of separating it from Bombay and also the wisdom of constructing the Lloyd Barrage. It is too late to undo the separation, for Bombay will not have Sind back and the Punjab, on the other side, cannot be expected to consent to incorporate Sind within itself. Whatever the arguments on which the separationists built their case, the anti-separationists took their stand principally on financial grounds and events have proved that their premonitions about the inability of Sind to face the financial implications of the Barrage were by no means exaggerated. In so far as both separation and the Barrage have come to stay, the problem of the immediate future is to review the present financial arrangements between the Government of India and the Government of Sind in the light of the province's experience during the period of autonomy, assess their adequacy and revise them so as to make their execution practicable, and at the same time make fair allowance for satisfying the essential needs of a backward province.

The present financial arrangements provide for the repayment of the principal of debt on the Barrage in the following manner. Repayment commences in 1942 and is spread over 40 annual instalments thus:—

1942-43 to 1956-57	75 lakhs.
1957-58 to 1966-67	60 lakhs.
1967-68 to 1981-82	50 lakhs.

To these annual instalments must be added interest at the rate of $4\frac{1}{2}\%$ on the debt outstanding. On the basis of total principal outstanding at 2475 lakhs in 1942, interest payable in that year would amount to 111·375 lakhs, so that Sind will have to make a total payment of just over 186 lakhs in the financial year 1942-43 on account of the Barrage alone. Considering the fact that the total revenue of the province for the year 1940-41 has been estimated at 405 lakhs (including the subvention of 105 lakhs from the Centre and the province's share of the income-tax estimated at $5\frac{1}{2}$ lakhs) this payment of 186 lakhs will be a staggering proportion of the provincial revenue.

No wonder then, that, year in and year out, Finance Ministers have sounded a note of anxiety in their Budget speeches. Thus in the Budget speech of 1939-40 we find the Finance Minister saying, "Our debts over-shadow us completely . . . . the estimated receipts of the Lloyd Barrage Unified System pertaining to the year 1938-39 available for the purposes of the debt, will barely suffice to meet the current interest charges and will allow of no actual debt redemption" . . . . "The Barrage revenues show no signs of being able to cope with the demand of the redemption programme which is fixed for the repayment of the Barrage debt and which is to commence from 1st April 1942 . . . . Our ability to cope with this programme depends almost entirely upon two factors; the receipts from land revenue and from the sale of Barrage lands." Again in the Budget speech of 1940-41: "The progress we have made so far in liquidating the Lloyd Barrage debt is disappointing and I am unable at present to see how we will be able to repay the Barrage debt owed by this province from the year 1942-43 onwards in accordance with arrangements described above."

Sind's financial position as presented above is undoubtedly hopeless. Land revenue has not shown very encouraging growth. Gross receipts from land revenue amounted to 190 lakhs in 1936-37, $162\frac{1}{2}$ lakhs in 1937-38, $165\frac{1}{4}$ lakhs in 1938-39, and the revised estimates for 1939-40 are put at 170 lakhs. The year 1936-37 was not a normal year inasmuch as in that year there were 5 revenue collections against a normal of 4. For 1939-40 the rise of prices

and revised assessment are responsible for an increase of 10 lakhs on the original estimate of 160 lakhs.

Receipts from sale of land amounted to 70 lakhs in 1935-36, 76 lakhs in 1936-37, 81 lakhs in 1937-38, 55½ lakhs in 1938-39 and they are expected to reach 80 lakhs in 1939-40.

With agricultural prices trying to maintain themselves against the pressure of accumulating stocks owing to fall in exports, the yield from land revenue and sale of land cannot be expected to show a considerable growth. It is feared that under these circumstances even the present slow rate of debt-redemption may not be maintained. This debt was redeemed to the extent of 32 lakhs in 1936-37, 16½ lakhs in 1937-38, 4 lakhs in 1938-39, and the revised estimates for 1939-40 stand at 27½ lakhs. The years 1936-37 and 1939-40 cannot be regarded as normal for reasons explained above. They over-estimate therefore the surplus of revenue available for redemption. On the other hand additional war expenditure on A.R.P., press censorship, price control and police amounting to over 3 lakhs for 1940-41 is likely to retard the pace of debt-redemption. Anyway, 1942-43 is too near to permit any miracles to happen in the financial prospects of Sind.

That Sind would be a deficit province was realised throughout the deliberations which led to formal separation. Sir Otto Niemeyer in conducting his financial enquiry in 1936 assessed the probable extent of this deficit and recommended subventions to Sind by the Centre to meet it. According to these recommendations, accepted by the Government of India, the subventions payable to Sind commence in 1937-38 and continue till 1981-82 in the following manner:—

1937-38 to 1946-47	105 lakhs.
1947-48 to 1966-67	80 lakhs.
1967-68 to 1971-72	65 lakhs.
1972-73 to 1976-77	60 lakhs.
1977-78 to 1981-82	55 lakhs.

In the opinion of the Government of India expressed in a telegram to the Secretary of State on this part of the

Niemeyer Report, "The subventions proposed are equivalent to a capital gift of something like 20 crores so that in effect a very large part of the Barrage debt is being cancelled." How the figure of 20 crores is arrived at is not clear but one fears that the statement misrepresents the situation. It is necessary to realise that Sind would have been a deficit province even without the encumbrance of the Barrage and therefore a subvention would have been payable to it in any case, as it is paid to the N.-W. F. province, Assam and Orissa, for instance. It might have been less than what has now been fixed but not considerably smaller because at present the province is able to meet interest charges, even with the help of the subvention, by starving the beneficent departments. It is also fair to appreciate the fact that the province of Sind as it stands at present was in no way responsible for the construction of the Lloyd Barrage. It was the Government of Bombay who was the author of the Barrage scheme, and the Government of India advanced capital for the execution of that scheme to the Government of Bombay. But the Sind of today is different from the Sind of the old Bombay presidency. Supposing the Barrage did not exist, is it conceivable that in Sind's present circumstances a scheme for a Barrage involving the financial operations of the size undertaken in the execution of the Lloyd Barrage would be thought to be practicable? Even in the somewhat better circumstances of 1921 it would have needed more than ordinary boldness to propose a Barrage in Sind, which was not a part of a larger and prosperous presidency. To impose on Sind such a heavy load of the Barrage debt is to inflict on it a financial paralysis which threatens to retard the development of its already poverty-stricken people. The present financial straits of Sind are reflected in the province's expenditure on nation-building departments. This expenditure will be found to be the lowest of all Indian Provincial expenditure on similar departments. Its expenditure on education, public health, medical services, agriculture, co-operation and industries is less than 15% of its revenue as compared with 24% in the Punjab, 26% in Madras, 24% in the United Provinces, 18% in the Central Provinces, and 16% in Assam.

If this is the state of provincial finances now under the load of interest charges alone, what repercussions the additional payment of 75 lakhs in 1942 will have, can best be imagined. Expenditure on essential services is usually highly inelastic. Small savings recommended by the Reorganisation Committee are likely to be absorbed by war expenditure of the kind mentioned above. Maintenance of security of life and property threatened by recent riots and assassinations will make additional calls on the resources of the province. Yield from land revenue and land sales has so far fallen short of expectations as shown. Even if expenditure on beneficent departments were to be reduced to the vanishing point, not more than 60 lakhs could be spared for meeting the first instalment. There is however one source of obtaining resources that is indicated in certain quarters and that is by reducing the ratio of working expenses of the Barrage to gross receipts from it. Comparing the Barrage with its total capital outlay of 28·12 crores with the Sutlej valley project capital outlay of 9·04 crores (British territory only), the former's ratio of working expenses to receipts is in excess of 40% while the latter's ratio is less than 25%. This difference on further examination of available statistics is explained not by extravagant administration of the Barrage, but by the failure of the yield from land revenue and sales to come up to expectations. The result is that in 1937-38 the net return from the Barrage was 2·44% only, as compared with 8·47% from the Sutlej valley project.

In summing up the financial implications of Sind's indebtedness and the manner in which it is to be discharged the following conclusions emerge:—

1. The provincial finances are earmarked to a very large extent for the next 40 years for meeting the liabilities of the Lloyd Barrage. An arrangement which takes away a large part of the provincial income in fixed charges makes provincial autonomy meaningless and the attainment of financial equilibrium impossible.

2. The liability of the Lloyd Barrage rules out all chances of Sind having a stable government, an efficient administration and a constructive programme of general

welfare. Under the burden of debt the province must lie low at its present level of hard existence and remain the most backward province in India.

3. It will be impossible to pay the first instalment of capital due in 1942-43. If that is the case with the first instalment, a drastic revision of the existing financial arrangements becomes unavoidable.

The ultimate question is this. Must the Government of India insist on seeing the welfare of the people of Sind touch bottom before taking steps to relieve them? The Barrage has so far proved a financial blunder. The world depression was not foreseen when its construction was undertaken. The desert of Sind was started on its career of conversion into a smiling garden at the time when the products of this garden, apart from its smiles, were the least needed, so that their prices were uneconomic. In a period in which practically all the countries of the world were subsidising their agriculture, and in some cases governments were financing the destruction and restriction of agricultural produce, Sind was launched on an enterprise of *expanding* agricultural production *and* making it *economic*. It has been an impossible adventure. Conditions are better now but not so improved as to justify the funding of the Barrage debt in 1942. The creditors must face facts. To insist on Sind observing the present financial arrangements would be committing a financial murder of this infant province. On the other hand to expect the Centre to write off the entire debt, as is advocated in certain quarters, would be unreasonable and unwise. But I venture to make certain suggestions which appear to me to be not only fair to both the creditor and the debtor but also practicable:—

1. Immediate relief should be given by a reduction in the rate of interest from $4\frac{1}{2}\%$ to 3%. In an era of cheap money and even a 3% par, it is not a little iniquitous to impose upon Sind a huge mass of long-term debt at $4\frac{1}{2}\%$. The latter rate was proper to the early twenties. But as governments all the world over including Sind's creditor, have, by means of loan conversion, brought the cost of their debts in harmony with the cheap money conditions of later years, Sind too should be allowed the benefit of cheap money

by fixing its indebtedness on a lower basis. A reduction of interest charges by 1/3rd would be a legitimate adjustment of liabilities to the present monetary conditions and not a charitable concession. It would be a welcome immediate relief to Sind without its having any perceptible repercussions on the revenues. Sind has so far met its interest obligations by starving the beneficent departments. I propose this reduction in the rate of interest not entirely with a view to enable Sind to redeem its debt with less strain on its financial resources but also to provide a greater margin of expenditure on productive and welfare activities. The financial state of Sind and the growing sense of insecurity and disorder are not mere coincidences.

2. The funding of the debt may be postponed to 1952 and till then the rate of redemption should be left to Sind's discretion. By that time the Barrage may be expected to be working at its optimum and yielding adequate returns to enable the repayment of capital in fixed annual instalments. This, however, is an alternative to what follows. The latter, I believe, will be found preferable.

3. If the Government of India cannot see their way to postpone the date of capital repayment, I suggest another method of making repayment possible with comparative ease in 1942, without altering the rate of subvention but on the assumption that the rate of interest is reduced to 3%. I suggest that the order of annual instalments as fixed at present should be reversed; so that the first 15 instalments are of 50 lakhs each, the next 10 of 60 lakhs each, and the last 15 of 75 lakhs each. This would be the really scientific way of debt redemption. The capacity of a business to pay dividends grows as it consolidates itself. Treated on business principles the Barrage can be expected to finance redemption at a higher rate in its later rather than earlier stages of development. The present arrangements expect more from it during its infancy than during its maturity.

Assuming debt outstanding in 1942 to be 2475 lakhs and that with present subvention and interest charges the budget of Sind leaves no surplus, the following two tables illustrate the effects of the present financial arrangements on the revenues of Sind (*a*) at 4½%, (*b*) at 3% (Table 1), and

the effects of payment of instalments in reverse order (*a*) at $4\frac{1}{2}\%$, (*b*) at 3% (Table 2).

TABLE 1.

Year.	Debt outstanding.	Capital payment.	Interest at $4\frac{1}{2}\%$	Subvention.	Additional demand on revenue.	Interest at 3%	Additional demand on revenue.
1942-43	2475	75	111·375	105	81·375	74·25	44·25
1947-48	2100	75	94·5	80	89 5	63	58
1957-58	1350	60	60·75	80	40·75	40·5	20 5
1967-68	750	50	33·75	65	18·75	22·5	7 5
1972-73	500	50	22·5	60	12·5	15	5
1977-78	250	50	11·25	55	6·25	7·5	2·5

TABLE 2.

Year.	Debt outstanding.	Capital payment.	Interest at $4\frac{1}{2}\%$	Subvention.	Additional demand on revenue.	Interest at 3%	Additional demand on revenue.
1942-43	2475	50	111·375	105	56·375	74·25	19 35
1947-48	2225	50	100·125	80	70·125	66·75	36·75
1957-58	1725	60	77·625	80	57·625	51·75	31·75
1967-68	1125	75	50·625	65	60·625	33·75	43·75
1972-73	750	75	33·75	60	48·75	2·25	37·5
1977-78	375	75	16·875	55	36 875	11·25	31·25

These tables show (*a*) that from Sind's point of view repayment by instalments in the reverse order at 3% would be the most suitable; (*b*) the next best arrangement is payment by the present order of instalments at 3%; (*c*) on account of the great increase in interest which it involves, repayment by instalments in the reverse order at $4\frac{1}{2}\%$ is less suitable than only the existing arrangements which have been shown to be untenable. Under (*a*) total interest

charges would amount to 2063·25 lakhs against 2663 lakhs under the existing arrangements, so that the Government of India lose 599·75 lakhs in interest spread over a period of 40 years. Under (*b*) the loss to the Centre will be 887·3 lakhs spread over the same period. Under (*c*) Sind will be little better off than it is now.

Thus from the point of view both of Sind and the Government of India the best course would be to reverse the order of instalments and reduce the rate to 3%. The proposal has the following advantages:—

1. It ensures a complete discharge of the debt in 40 years.

2. It obviates the necessity of increasing the subventions.

3. It obviates the necessity of writing off any part of the debt.

4. It involves a loss of 599·75 lakhs in interest to the Centre spread over 40 years but it is a justifiable loss, for, it results from fixing the rate of interest at a more equitable level.

5. It involves an extra payment of 287·5 lakhs by Sind by way of interest during the entire period of repayment, as compared with what Sind would have to pay at 3% on the existing order of instalments. But this payment is worth it for it relieves a great strain on provincial revenues. Thus in 1942, for example, the revenues will have to bear an additional burden of 19½ lakhs only under the plan proposed against 81 lakhs under the existing arrangements and 44 lakhs under the present order of instalments at 3%. In 1947 the burden of debt repayment will be less under the proposed scheme than under any other. Thus the scheme has the merits of being not only practicable but also in conformity with the principles of sound finance and social justice.

Conference Proceedings

SPEECH DELIVERED BY HIS HIGHNESS THE MAHARAJA OF MYSORE ON THE OCCASION OF THE OPENING OF THE JOINT SESSION OF THE ALL-INDIA ECONOMIC AND POLITICAL SCIENCE CONFERENCE HELD IN MYSORE

28th December, 1940

I am very glad to be with you to-day to open this Session of the two important bodies, which are meeting in my Capital. It is a great pleasure to me to welcome to my State and Capital so many distinguished teachers of Economics and Political Science, the twin sciences a correct application of whose principles is so essential to human welfare, and I hope that the few days you will be spending in our midst will be a time of enjoyment as well as of work. I trust that you will utilise the arrangements made for you to visit, not only centres of what I may call professional interest, but also some of our beauty-spots, and that you will return to your homes with pleasant recollections of your short stay with us.

The two Associations are holding their annual Sessions at the same place this year, and have decided also to have a joint Session. I need not commend to this body of experts the soundness of the decision, knowing as we all do how closely related are Economics and Political Science, and how intimate and far-reaching is the influence of economic factors upon the political life of a community and how profoundly political objectives affect, on the other hand, its economic life. Indeed we may even doubt whether, in these days of interpenetration of political and economic objectives, any useful purpose is served by segregation of Economics from Political Science. However that may be, I trust the present Session will fully justify the expectations with which the decision to meet together has been made, and that the innovation will become a permanent feature in the coming years. I am confident that your deliberations, separate and

joint, will be friendly, constructive, and helpful in solving the economic and political problems which confront our own country and the world at large.

The affairs of men are sadly and tragically in need of unimpeachable knowledge and wise guidance. A terrific struggle, resembling a zoological war for the survival of the species, is going on, and its outcome will decide whether mankind will resume its slow march up the path of progress, or lapse into an age of science-fed barbarism, from which the values of life and the graces of European civilisation will be banished. Those whom the Gods wish to destroy, it is said, they drive mad first. As one hears day after day of endless and senseless destruction of houses, churches, factories, ships, railway yards, harbours and precious human lives, one has much sympathy with Bishop Butler's startling query whether communities might not go mad like individuals.

Yet the present century began on a note of hope. The era of European wars seemed to have come to a close with the Franco-Prussian war; differences there might be between the great nations of Europe, particularly on the frontiers of their far-flung empires, but these differences never overflowed the channels of diplomacy. Viscount Haldane could suggest so late as September, 1913 that "the barbarism which once looked to conquest and the waging of successful wars as the main object of statesmanship seems as though it were passing away," and that there was "little effective challenge of the broad principle that a nation has, as regards its neighbours, duties as well as rights." Internal political progress kept pace with this improvement in international relationships. There was no serious erosion of the fundamental rights of citizenship, which were embodied in the constitutions of several European countries. Social justice was following closely in the wake of efficiency in production, as was indicated by increased taxation of the rich to finance schemes of social amelioration and security such as Labour Exchanges, Old Age Pensions, and Unemployment Insurance.

The Great War was indeed a catastrophe, but the League of Nations, which was its outcome, at least gave a form and a local habitation to the dreams and yearnings of

centuries, while the sister institution, the International Labour Office, was born of the belief that universal peace could be established only if it was based upon social justice. Even the Great Depression of the early thirties served to emphasise the need for international co-operation if mankind was to realise the promise of science and achieve plenty for all. As a notable tract of the time put it, "Man can then, freed alike from enfeebling impoverishment and harassing anxieties and insecurities, use the resources he now has to give himself both a basis of secure material comfort and adequate leisure . . . . And then the real work of civilisation can at last begin."

Why did the years that followed belie these hopes, and after unhappy and futile efforts to appease those whose appetites increased with every appeasement, fling Western Europe into the witches' cauldron, which seems to be drawing into it slowly but relentlessly the rest of the world?

Some may find an answer ready to hand in the powerful play of personality, and consider themselves fortified by Acton's famous dictum that the course of 19th century history had been diverted twenty-five times by actual or attempted crime. Nor can it be denied that the course of events in the last two decades has been markedly affected by the sinister personalities of Hitler and Mussolini. But one must seek for a deeper cause and a fuller explanation of the tragic turn events took in the thirties. The sovereign national state stands forth as the one all-embracing cause of the descent of mankind from the top of golden hours to the tragic depths in which its destiny is being now fought out. The rise of nationalism and its objective embodiment in nation states and national economies no doubt marked a necessary stage in the development of human society, but even at the height of the popularity of nationalism as a cult, which was glorified almost into a religion by Mazzini, Acton sounded a note of warning against the danger of identifying a nation with the State, and prophesied that its course would be marked by material as well as moral ruin. The spirit of nationalism was wholesome as a bond, but became sinister when it placed a barrier between one human group and another. Reinforced by metaphysical theories of the

absolutism of the nation state, and tainted by race prejudice, the sovereign nation state became a menace to the peace and the prosperity of the world. New nation states came into being, and national consciousness developed among peoples under a common rule, just at a time when improvements in the means of communication, progress in the technique of production, and changes in the methods and weapons of war, all combined to make national frontiers irrelevant, obstructive, and an anachronism. When the environment demanded a removal of national barriers, political and economic, in the interests of national states themselves, the spirit of national exclusiveness became deeper and more widespread. Instead of seeking security in common understanding and common organisation, the national states sought to strengthen themselves by armaments and restrictionism.

In its economic manifestations, nationalism went against the logic of facts, and the efforts to establish self-sufficiency led neither to prosperity nor to a sense of security. The wars and the fears of war on the political plane had their counterpart in tariff wars and in numerous devices and measures to get the better of the competing countries, but the common men and women received neither abundance nor security of employment. It has been said that they stood to lose their jobs in slumps, their liberties in fascism, and their lives in war. All the mechanical inventions of the 19th century do not seem to have lightened the drudgery of their lives. It was claimed recently that the problem of production had at last been solved for the first time in the history of man, and that in the immediate future, it should be possible "for every present need of man to be satisfied with something between one and three hours' work per day, and beyond that lie possibilities for extending the capacity for enjoyment and activity indefinitely." These possibilities could have been realised only if mankind by an act of will organised itself as a unit, and exploited the unlimited resources of the earth as a whole. Such common action was not to be thought of so long as economic nationalism raised barriers between countries and prevented the free movement of goods and labour between one country and another, such limitations being considered necessary for strategic reasons.

National egoism has been responsible for the sharp antagonisms between states which have led inevitably to conflict and war. The marvellous discoveries of recent years which gave man increased command over nature and opportunities for increased welfare have been harnessed to the service of the sovereign nation state, which meant in the main larger and more elaborate preparations for war. This misuse of the gifts of nature and science gave rise to the misgiving that man was not morally fitted to handle the new weapons that science had placed in his hands. "Each new machine being for man a new organ, his body became suddenly and prodigiously increased in size, without his soul being able at the same time to dilate to the dimensions of his new body." It should have been the task of the intellectuals to preserve a cool and unbiassed outlook in such a conjuncture and instruct the rest of the community, but unhappily they failed in their duty and were guilty of treason to their charge. Instead of instructing the minds and elevating the hearts of their fellow-citizens so that they could rise above national narrowness, they not only themselves shared the sentiment, but also exalted the sovereign nation state, and are responsible for the intellectual organisation of political hatred.

The sovereign nation state, exalted by metaphysical theories of the state, often exploiting racial prejudice, resting on economic self-sufficiency organised for strategical purposes, using the powerful weapons of modern science for destructive rather than for constructive ends, based on mass ignorance and inertia, and supported by the intellectuals—that is the primary cause of the European tragedy.

Therefore a New World Order in which peace and security shall prevail will not follow automatically the defeat of the Axis Powers. The enemy within the gates must be defeated, and the source of the present difficulties of Europe, a political structure which has outlived its utility, must be removed. The sovereignty of the nation state must go. The masses, like the dwarf in the story, who accompanied the giant on his adventures and paid in limb after limb for each success of his partner, are suffering and paying heavily for the crime and folly of their rulers. It is certain they will

not tolerate after the war a regime that will again expose them to the evils of political conflict and economic insecurity. Unless they are assured that a new order will be established in harmony with their hopes and needs by peaceful and constitutional means, the millions who are bearing in patient hope the uncertainties and the horrors of the present war, will turn to those who make insidious promises of a short cut to Utopia through revolution.

A great responsibility lies on the architects and builders of the New Order after the war. Success in their labours will depend on the appeal the new schemes make to the reason and the feelings of men and women, on the intellectual apprehension and the emotional receptiveness with which they meet. The task of those who would build a New World from which war and poverty shall be banished is two-fold. They have to prepare plans for the New Order of things, political and economic, which can be demonstrated to be possible as well as urgent and desirable. The other part of the task is to enlist the feelings of men and women on their side, to make them willing and eager to adopt their proposals. Not only must the minds be instructed, the hearts must also be enlarged. The first is the task of economists and political philosophers. For the performance of the second, mankind must turn to the psychologists and the educationists, perhaps to the prophet and the seer, who alone can make the blind see and the deaf hear. Students of Economics and Political Science, who have to bear a large share in the task of world reconstruction, will supply instruction and enlightenment, hoping that God in His wisdom will send inspired leaders who will lead mankind from the valley of tribulation to the kingdom of peace and happiness.

SPEECH BY RAJAKARYAPRAVINA N. S. SUBBA RAO, M.A. (CANTAB.), BAR-AT-LAW, VICE-CHANCELLOR, UNIVERSITY OF MYSORE

It is my privilege to follow the address of His Highness the Maharaja with a few words on behalf of the Reception Committee. On behalf of my colleagues and myself, I desire to say how pleased we are to have you in our midst, and to assure you that no efforts will be spared on our part to make your stay comfortable and pleasant.

It is not very long ago that I was taking classes in Economics; you will kindly observe I do not say I was teaching the subject; and I am afraid I must add I was taking at one time classes not merely in Economics, but also in Politics and History. In those unreformed days Economics and Politics were the poor relations of History, and the teaching staff in History was responsible for the teaching of Economics and Politics, even as the same Boards of Studies and of Examiners did duty for all the three subjects. Things have changed greatly since, and Economics and Politics have set up house for themselves, though each has a 'receiving' guest, Mathematics in the case of Economics, and Psychology in the case of the latter, though Psychology claims the right to lodge in the Economics Household also. Economics has now a Chair in every Indian University, but though Politics is yet to receive similar recognition, independent departments of Politics are coming to be a marked feature of University organisation.

This change in status and organisation has gone with a great change in environment, in an increase in what may be called laboratory facilities. It has been a handicap of social sciences like Economics and Politics that their theorems are not based, like those of the physical sciences, on regulated experiments in laboratories under proper control, and the contributions of economists and political philosophers have often been merely analysis and explanation of episodes in the past, or bold incursions into what might be. But no science

can thrive on post-mortems or utopias. In recent years, however, the economic and political environment of man has been transformed into a huge laboratory, in which daring experiments are being carried on, sometimes on so colossal a scale that there is every danger of the laboratory itself being blown up, should the experiment be a disaster. The economic and political experiments of the totalitarian states, the war and post-war measures in the fields of currency, foreign trade, and public finance, the New Deal, are illustrations in point. The accepted theories of State and Government are not merely under revision, but are facing a serious challenge in discussion and operation.

There is thus plenty of fresh material for the testing of our theories and for the sharpening of our tools of investigation and analysis. But it has been our ambition as students of Economics to grapple with social suffering, and help in Marshall's words, "to open up to all the material means of a refined and noble life," to contribute in some degree, directly or indirectly towards social betterment. So also students of political science aspire to make a contribution towards the construction of a stable and satisfying political order, national and international. But the opportunities for us seem to be restricted. It may be that according to the familiar story, when Adam Smith entered a room in which statesmen and men of affairs were assembled, these all got up, one of them remarking that they were all his pupils. If a Professor of Economics or Political Science now enters, literally or figuratively, an assembly of men of affairs, there is only a raising of eye-brows in disdain and amusement. Marshall, when challenged before the Gold and Silver Commission with regard to some statement of his about bills on the wheat market, could put in his place his adversary, "a gentleman of experience, who was speaking, not only from watching the market, but as being directly engaged in it to a large extent for very many years past," by saying that it did not follow he had watched the right things, and unless he had done so, his evidence did not bear on the point. We have now instead his successor, Professor Pigou, admitting despondently that "the hope that an advance in economic knowledge will appreciably affect actual happenings is a

slender one. It is not likely that there will be a market for our produce." A similar view has been expressed• by Professor Viner in his Presidential address to the American Economic Association last December, but he attributes this result to numerous handicaps under which the academic Economist labours as an active participant in the policy-making process. His rôle in the ordinary course of events is to help legislators and the executive by his expert advice. But "the expert should be on tap, not on top." Professor Viner gives, however, the academical economist a more important rôle, that "he is the custodian for society of the long view in economic matters," a view which is entitled even in troubled periods to a full hearing, though not to undisputed dominance. With that we must remain content, as academical students of Economics and Political Science. But it is by no means an unimportant rôle in society to be custodians of the long view, for, in the words of J. M. Keynes, "the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite free from any intellectual influences, are usually the slaves of some defunct Economist. Soon or late, it is ideas which are dangerous for good or evil."

The meeting terminated with a vote of thanks to His Highness the Maharaja of Mysore by Dr. B. V. Narayanaswami Naidu, General Secretary, Indian Economic Association.

PRESIDENTIAL ADDRESS

BY

D. R. GADGIL, M.A., M.Litt. (Cantab.),

Director, Gokhale Institute of Politics and Economics, Poona.

Your Highness, Ladies and Gentlemen,

I have to thank the members of the Indian Economic Association for having elected me President of the Association for the year and for having thereby conferred on me the privilege and the honour of presiding over this, the 24th session of the Indian Economic Conference.

The Economic Conference meets today in this historic city under the shadow of two great calamities—one domestic and the other universal. In His late Highness Maharaja Sri Krishnaraja Wadiyar Bahadur India has lost a noted personality of modern times and this State one who may be verily termed its maker. On this occasion all that need be said is that in the practical solicitude for the welfare of his subjects, in the discriminate and happy choice of ministers, in the love and patronage of learning and the arts the late Maharaja ably represented and carried on the noble tradition of the *Kshatriya* rulers of the Deccan. I may add that of his successor we confidently expect no less.

The world has now lived through more than a year of a war which has involved a larger extent of territory and peoples within it than any previous war in history; and it would be a mere truism to say that the crisis through which we are passing will materially influence the future trend of human history. At such a juncture the confabulations of academicians are apt to appear especially unreal to minds that are almost always a little impatient of them. The sanguine expectations entertained of the spread of reason by the founders of our science have failed to materialise and

wars continue to be waged even though it may be conclusively proved that they bring material gain to no party. But this is no reason for despair. Humanity has come through similar crises in the past. Progress has not always been uniform or unimpeded and human history has had its dark ages. Through it all, however, a continuous strand can be discerned which represents the progress of a rich and growing tradition. This tradition represents the working faith of those who would look to a solution of human problems in a close and sympathetic understanding of the natural and social forces among which we live. The majority of those assembled here share, I believe, such a faith and a crisis like the present makes all the more urgent the call on us to live by that faith. So that those of us who are unable to take an active part in the struggle that rages round us may at least feel that they are doing their bit in fitly carrying on the intellectual traditions which we profess to inherit.

It has been a common practice of my predecessors in office to pass under review during the course of the annual presidential address a large number of questions of current interest. I intend, however, to depart from this practice and to take up a single, though somewhat wide, theme as the subject of my discourse. The theme I have chosen is the consideration of the manner in which the economic policy of the State in India should be moulded. The definition of the principles of public policy on economic questions is always of the highest importance and it is particularly important at times like the present. The economist has always claimed to speak with authority on this matter. The founders of our discipline—the Physiocrats and Adam Smith—were concerned intimately with the definition of the attitude of public authorities towards economic life and the extent and the methods of regulation to be exercised by the State over it. Indeed, it may be said that the search for the criteria of economic policy was the motivating force of their intellectual activities. Discussions regarding a public economic policy have played a dominant part throughout the subsequent history of economic thought. In recent years there has, no doubt, emerged a school of thought which

would divorce, almost entirely, the connection between economic science and public policy. The actual behaviour of the majority of the protagonists of this school, however, belies their protestations. For, some of the most strenuous of them are among the most prolific and the most emphatic in the expression of opinions on matters of immediate public interest. Obviously the only title to consideration from the public to which academic economists can lay claim is that acquired by their study of economics. If, therefore, the "pure" economists behave as if in their opinion the study of economics entitled them to say something on current problems which was worth a hearing from the public, this can only be because there subsists some connection between the study of even "pure" economics and public policy. This problem, then, of the end and means of public economic policy has always been one of the main objectives of the economist's quest and continues to hold the position even today.

To the question whether there are any definite criteria of public policy which economics lays down the economist has until very recent times been wont to give an unequivocal answer. It has usually been axiomatic with him that the welfare of the largest number was and should be the proper goal of economic activity and that this was best attained in a society in which the activities of the private individual were interfered with as little as possible. The doctrine of *laissez faire* and economic science were born together and have until recently been inextricably associated. During the last few years doubts have been cast on many of the assumptions on which the doctrine of *laissez faire* has been founded and academic economists have been chary of making the assumptions in their analysis. It has, for example, been argued that the concept of welfare should be banished from the field of economics as it was based on reasoning that was not scientific. And some economists have been so impressed with the objection that a considerable amount of ingenuity has been expended on proving that welfare economics, which after all represents the chief body of thought with which most except the "purest" economists are chiefly concerned, can be retained within the fold without making the unscienti-

fic assumptions. On the other hand, there is also a growing body of thinkers who feel that the assumption that a minimum of interference leads to a maximum of welfare is itself not justified. However strong these dissentient trends may have shown themselves in modern times, the main body of economic thought is still deeply under the influence of the doctrine of *laissez faire*. Economists when writing on public policy habitually take the *laissez faire* assumptions for granted and the models of the economic theorist are so constructed as to lead to *laissez faire* conclusions. Indeed, whereas one result of the Great Depression has been to move public policy and some economists away in most countries from *laissez faire* it has also led to a revival of some characteristic *laissez faire* dogmas in an acute form in the academic world. I do not think that it is necessary for me to give examples of the dominance of academic economics by assumptions which lend support to *laissez faire* or of the bias towards it in the writings on policy of economists in general. But some remarks may certainly be made regarding the modern version of the older doctrines which has played a considerable part in the writings of economists during the last ten years or so. There is yet no uniformity in the formulation of this modern version; as a fact, it is usually to be found only implicit in the analysis. I may, however, cite for illustration certain explicit statements recently made in regard to it by Mr. Harrod.[1] Mr. Harrod treats of the competence of the economist to give advice and is discussing the limitations on the validity of the advice tendered by him. There are in his opinion certain directions in which the advice has unqualified validity and is universally applicable. The great merit of Adam Smith according to Mr. Harrod lies in his having found the one criterion which enables the economist to judge of policies and actions infallibly. Mr. Harrod calls this the "Economic Criterion" and defines it in the following manner. "If an individual prefers a commodity or service X to Y it is

[1] R. F. Harrod: Scope and Method of Economics, *Economic Journal, September*, 1938.

economically better that he should have it. Similarly if the individual prefers work X to Y or dislikes it less it is economically preferable that he should have it." This constitutes, we are told, the economist's criterion of good or bad. But surely it is merely the substance of the old *laissez faire* doctrine under a new guise. This definition of the "criterion" raises many problems. Firstly: What is the meaning of "economically" better? What can constitute the economist's "good"? Are not terms being used here which are connected essentially with the process of valuation? Can anything be called economically good or bad, as, say chemically or biologically good or bad, without the intrusion of extraneous values which have nothing to do with the scientific study of surrounding phenomena? Having first decided that economics is not a normative science, this looks like an attempt at prejudging questions of public policy by introducing by the back-door normative considerations in a definition of the economic good. The definition again embodies typically *laissez faire* prejudice. The "criterion," let us note, is said to be of universal validity. But men have in large numbers habitually preferred drugs and drink, unhealthy food and overwork; all action taken to prevent them from having their hearts' desires in these directions would then have to be described as economically "bad" and the "Opium War" could be characterised as one undertaken in pursuit of the economic "good". Again, why should the preferences of individuals be taken to be axiomatically supreme and why should the criterion entirely neglect the group or the society? It is difficult to discern any "economic" reasons for this definition of "economic criterion" and Mr. Harrod offers us none, though he insists that advice based on the "criterion" will be free from "ethical bias". I do not desire to discuss at length Mr. Harrod's attempt at defining the economic criterion. My purpose in drawing attention to it was merely to emphasize the hold of the *laissez faire* attitude on economic thought even today and the curious ways in which it manifests itself. Most academicians seem yet to believe in a presumption in favour of *laissez faire* and seem to think that the onus of the proof is necessarily on the shoulders of those who would not agree

with their assumptions. The attitude of Prof. Viner[2] who frankly states that the economic and political formulations in the liberal tradition are dogmas and not axioms is yet too rare and the opinion expressed by Mr. Keynes years ago that problems of policy cannot be settled on abstract grounds but must be handled on their merits in detail is yet unheeded.[2] Though the academicians are still ruled by traditional beliefs the trends in public policy have been decisively reversed. During the last two decades events have increasingly conspired to move governments into policies of greater and wider interference. This movement has reached a climax during this last year when we have found the "Economist" newspaper—the very home and citadel of the liberal tradition in economics—supporting vigorously such heterodox doctrines as that of a "National Minimum". In this country, however, those in authority still cherish the old dogmas and over our economic destinies rule those who openly express contempt for the tradition in Indian economic thought which has ventured, for many decades past, to express dissent from them.

I do not desire to detain you long with a discussion of the familiar theme of the operation of *laissez faire* in India during the last 100 years. The fruits of what may be called the obviously "interested" version of this doctrine represented, of old, by the cotton excise duty and in recent times by the "economic safeguards" lie outside the scope of my subject. I shall further not talk about policy in relation to trade and industry where also "interest" may be said to have entered to a greater or less degree, but shall deliberately choose for illustration one or two extensive fields where *laissez faire* may be supposed to have been worked without any bias or prejudice. The development and the working of the rural credit system in India offers a specially instructive example. We can here witness the results of a rapid transition from conditions of restraint imposed by laws and by social conventions to a state where there was complete

[2] J. Viner: Short and Long Views in Economic Policy. *American Economic Review*, March, 1940.

[3] J. M. Keynes: *End of Laissez-Faire*, 1926.

liberty for the borrower to ruin himself and for the creditor to exploit him mercilessly. The classic description of the debtor-creditor relations created by the joint operation of *laissez faire* and the British judicial and administrative system is that contained in the report of the Deccan Riots Commission. This is the first vivid official account; later studies in various parts of the country have added to it much in detail and the elaborateness of analysis but the essentials of the problem remain as then disclosed. The fundamental factor in these relations is the great disparity in knowledge and economic power between the two parties; so that, where the disparity is the greatest the results are the worst. It is in the more precarious and poverty-stricken tracts that the moneylender is decisively dominant; and where, as in the case of the aboriginals, these conditions are accentuated by habits born out of a traditional primitive life the borrower is often no better than a serf.[1] The failure of a policy of *laissez faire* to generate corrective forces, even in the very long term, is only too obvious over the whole field of Indian rural credit.

I would, in this connection, draw special attention to the intrusion and the spread of the non-indigenous moneylender in many parts of rural and urban India. Here again the poorer the tract or the class the more in evidence is the non-indigenous moneylender. The rural type is the earlier and is well described by the Deccan Riots Commission. The urban type takes rise later and culminates in the terrorising bully whom all students of labour conditions, especially those of industrial labour, agree in considering a social pest needed to be eradicated immediately. We shall leave it to the champions of *laissez faire* to discover the services to society of the non-indigenous moneylender which justify his emergence and spread; for, he certainly brings neither technical skill nor capital into the locality. To me his chief asset seems to be his ability to disregard the conventions and the decencies by which the social group, in which

[4] For a recent official description see Symington: Report on the aboriginal and hill tribes of the partially excluded areas in the Province of Bombay, 1939.

he finds himself, is bound and his willingness to take the extremist measures within the law and, if possible, even outside it. With this advantage he is able to oust the indigenous moneylender in all the poorer and the socially less integrated communities; and wherever he flourishes he is a force making for further social disintegration.

A parallel to these circumstances of our credit system can be found in the West chiefly in the field of consumption loans in the big cities. It is noteworthy that the need for regulating this field severely has been felt in most of the advanced countries and that in U.S.A. "small loan" legislation has evolved, in most states, a strictly supervised system of licensed and controlled moneylending.

Another large field in which the failure of the usual *laissez faire* assumptions may be shown to be markedly evident is that of the wages of industrial labour. The traditional market analysis yields the result that payments for similar services will be the same and it has been usually taken for granted that payments to the various types of workers in given occupations or industries in a locality or a region will tend to uniformity. This trend should further be specially marked among workers in modern large-scale industry who are concentrated in a few important centres. The data regarding wages paid to industrial workers in India reveal a state of things which is at considerable variance with the result of this market analysis.[5] Except where some measure of collective bargaining or external regulation is present, large differences are found to exist between the scales of payments to workers engaged in even contiguous establishments and no trend can be observed towards the disappearance or reduction of such differences. The forces which are usually said to make for a disturbance in the working of a free market for labour in other countries have mostly been absent in India. Trade Unions have been either absent from large parts of the field of industrial labour or, where present, have been mostly ineffective; employers'

[5] This statement is based on an examination of recent data relating to industrial wages in India which I undertook in another connection.

organisations have also not usually paid any attention, till very recently, to the regulation of wage rates and the State has done nothing. And yet in this market, subjected to almost no influence or interference from outside, one finds conditions which can only be described as chaotic. This leads me to suggest that in the actual world, free market analysis works out as supposed only under a given set of social conditions. For example, in England, where most of these ideas were first formulated wages were, for the greater part of the nineteenth century, influenced over a large part of the industrial field by custom and convention. Entirely apart from the influence of Trade Unions, the Webbs have pointed to the extensive area covered by "shop bargains," by "custom of the trade" and by local "working rules." One suspects that it was more these, than the fact of a free labour market, that brought about and maintained such state of order as appeared in English wage payments in the nineteenth century. English labour in the modern machine industry, especially skilled labour, never lost the organisational traditions of the earlier period and these grew in volume and influence with the progress of the century. In India, on the other hand, there was no such continuity of tradition; industrial labour grew up mostly in new cities and was recruited from diverse regions, diverse occupations and from all strata of society. This heterogeneous mass was again not stable in its composition for any long period. Hence it, and in a somewhat similar manner the class of employers also, ideally fulfilled the requirements of free market analysis. The result lends support to the view that except under appropriate social conditions *laissez faire* does not lead to order but, as one would naturally expect it to do, to chaos.

I may now go on to a consideration of another concept closely associated with *laissez faire* which has had and which continues to have a considerable influence on public policy. This is the "universalism" which is implicit in traditional economic analysis. The international liberation of the eighteenth and nineteenth centuries which dominated the development of modern economic analysis is based on what Prof. Robbins has termed the "cosmopolitan utilitarian

calculus."[6] Let us realise clearly what the academic economist in Europe means by the cosmopolitan calculus. By the cosmopolitan calculus is not meant a careful calculation of the effects of given policies pursued by individual nations on the particular circumstances of the different peoples and nations in the world. Such a concrete study is entirely foreign to the notions of these economists; indeed, if attempted, it would have revealed to them the great difficulties of the cosmopolitan calculus and the impossibility of finding a uniform basis on which to conduct the calculations. The cosmopolitan calculus of the international liberal was based on the hypothesis of a uniformity of world conditions and meant merely the generalization of such causal relations as may be discerned in the working of the economy of an advanced European nation. Beer has pointed out that the universalism of the Physiocrats is derived largely from medieval schoolmen.[7] The chief argument advanced by Quesnay, for example, against the mercantilist notion that one nation can profit in trade at the expense of another was that a good and a just God has wished that it should not be so. Quesnay had further no opinion of the merchant engaged in international trade and thought of the financier as a stranger in his own land. Adam Smith's beliefs had not the same medieval and theological bent; they were dominated by the naturalistic concept of the "invisible hand." It is noteworthy, however, that this confidence in the beneficent working of natural forces did not lead Adam Smith to ignore the realities of the situation, as witnessed by his acute analysis of the working of the government of the East India Company and its officials in Bengal.[8] None of the classical economists or their followers in the nineteenth century exhibited, however, this faith or this vision; their universalism was for the most part merely

[6] Prof. L. Robbins: Economic Factors and International Disunity. [World Order Papers, 1940.] It is interesting to observe Prof. Robbins deploring, in this connection the disregard of the utilitarian calculus the prestige of which in economic analysis he has done so much to undermine.

[7] M. Beer: *An Inquiry into Physiocracy*, 1939.

[8] Adam Smith: *Wealth of Nations*, Bk. IV, Ch. VII.

an assumption implicit in their analytical procedure, an assumption which was rarely explicitly stated or defended and whose nature was never properly explored. If these economists had been endowed with the same vision as Adam Smith, we would surely have found at least one of them explaining how the nature of British interests in India and the structure of their administrative machinery made it impossible for the government to smoothen the transition from one economy to another in this country.

While the genesis of this peculiar "universalism" is clear its dominance and continuance till very recent times needs explanation. It is a commonplace of the history of human thought that notions are widely accepted and popularly believed not because they can be proved to be logically valid but because they work. In retrospect, it may appear strange that such beliefs were once held but contemporaneously they derive their strength from their being efficient instruments in building up concrete workable policies.[9] The universalism of Anglo-French thinkers was in this manner justified by its fruits; it worked. Or, to differentiate between the two, it may be said that the French belief in universalism continued to be founded in an abstract philosophical idealism while the British belief had a more solid and practical basis. The French interest in international trade or technological advance was, throughout the period, of a comparatively minor importance. To the British, however, their universalism was a practical necessity. At the beginning of the nineteenth century the British were leading the world in material production technique to an extent unparalleled in modern history. The greater the field over which they were able freely to operate, the greater the extent to which they reaped the fruits of this advantageous position. Prejudices, however,

[9] It is not necessary to resort to the materialistic philosophers in order to find support for this proposition. Cannan (History of the Theories of Production and Distribution) has, for example. conclusively shown that while the ideas of the Classical Economists were scientifically unsatisfactory, they were excellent tools for dealing with the immediate concrete problems of the Poor Law and the Corn Law. Whitehead (Science and the Modern World) puts forward an analogous proposition in a wider context.

die hard and it was not till the nineteenth century was considerably advanced that universal free trade was, even in England, fully accepted and operated upon. The fruits of the policy were, however, too obviously good and plentiful for it not to secure general acceptance. This explanation is rendered the more plausible by the subsequent history of English ideas on the subject. The loss by England of the decisive leadership in technology towards the end of the century leads to a change, first in emphasis and then in fundamental ideas. It may be admitted that the position of the bulk of the economists and intellectuals was unchanged till about 1920. But the course of the last two decades has revealed interesting developments. Among living economists there is perhaps no one who can sense as keenly as Mr. Keynes the inwardness of passing events; and it was he who in his "Economic Consequences of Mr. Churchill" first put forward an English case in favour of discarding universalism in the monetary sphere. And when some years later his predictions were proved only too correct he came out openly in favour of national self-sufficiency in this respect. A surprisingly large body of English economists immediately agreed with him and thus ended the sway of the notion of universalism. For, you cannot interpret the brotherhood of man sectionally and uphold universalism in one sphere while rejecting it in another.

It is too simple an explanation of this revolution in ideas to talk of it in terms of a betrayal or an aberration on the part of the intellectuals. Truth to tell, the roots of this belief were never too deep and its character was always formal. I may illustrate this by referring to the development of economic thought on the subject of what has come to be called "technological unemployment." The subject has naturally received the attention of economists from almost the beginning of the industrial revolution, but its consideration was for the larger period conducted under somewhat peculiar conditions. The economists when discussing this question always took the long view. This was not only because that was what the economist habitually did but also because the short-term effects of technological changes were not fully felt in the countries in which the

industrial advance was taking place. For the greater part of the nineteenth century the bulk of the unemployment resulting from industrial advance was evident in countries outside the advanced countries of the West and only the expansionary effects were felt within their areas. The adverse effects of the mechanisation of the cotton industry, for example, were, except for a short period in the beginning, felt chiefly in the distant continents. The same was the result of the growth of the metal and engineering trades. On the other hand, the increased demand for machine-made goods from distant peoples was reflected in a steadily growing employment in the new industries in these pioneering countries. The economist could, therefore, content himself with pointing to the obvious benefits, in the long run, of the technological revolution without troubling himself with the length of this period or the misery that might be caused in the intervening years.[10] The nineteenth-century economist confined himself optimistically to the long view not because he shirked from thinking of the short period but because during that century, when the wheels of progress ran smoothly, there was no need to concern oneself with a shorter or a more critical point of view. It is only recently that the spread of modern industry to other countries and continents and the continued progress of inventions have brought home the difficulties acutely.[11] That is why there has been in

[10] This aspect was not so neglected by the English writers in the earlier part of the 19th century as later. But then it should also be noted that they did not resort to the cosmopolitan calculus. For example, Babbage when writing on the exportation of machinery (*Economy of Manufactures*, Chap. XXXIV) advocates free exportation not because a spread of the new technique was in the interests of humanity but because, for a variety of reasons, such exportation could not harm English interests.

[11] It is part of the topsyturvydom, from our point of view, of western economic thought that when the short-run now receives attention it should be almost entirely in connection with the progress of technical advance in non-European countries. Thus Prof. Staley in his broad and sympathetic survey of world problems cites the following as the most typical example of the occasional conflict of world welfare with the welfare of particular countries. He writes: "The British textile industry, for example, has thus far borne the brunt of the transition occasioned by the

recent years more consideration given to the immediate unemployment caused by the progress of technology, as apart from the larger employment it may ultimately create; and in this latter respect also the verdict is not so emphatic as it used to be once. Even so the industrial countries of the West have experienced nothing like that entire upsetting of the traditional economy without compensating alternatives which has been our experience for a century. The nearest to this experience that they have approached has been in the field of agriculture, where the technological changes in Colonial agriculture have impinged disastrously on the peasantry of many European countries. Even the modern refinements in the analysis of technological unemployment do not take into account the large variations in the incidence of this unemployment as between country and country. And yet to us in India these differences are the most striking feature of the situation. To us the technological revolution has meant chiefly the successive loss of avenues of employment. And this experience must continue with the constant progress of technology as long as the disparate position continues. Wherever either social, political or geographic factors prevent the wide adoption of modern technology the impact from outside of its products must lead to unemployment without necessarily resulting in sufficient compensatory action. These aspects of the question rarely receive their due attention and the analysis is carried on on the hypothesis of universalism because its postulates fit, approximately, or used to fit the facts in the Western countries.

All these considerations emphasize the fundamental importance, in determining economic policy, of the social environment within which the economic problem is posed. In the field of applied economics the social background is all-important, especially when there is an attempt, as has happened throughout the last 150 years with us, to apply

increased efficiency of Japanese textile-making." (E. Staley. *World Economy in Transition*, 1939, p. 92.) There is not a word about the heavy transition costs that countries like India and China have borne for over a century and still continue to bear!

the theoretical analysis formulated and the lessons of experience gained in one country to another very differently circumstanced. The economic history of modern India affords many examples to illustrate this statement. Consider, for example, the first important step in economic policy taken by the English in India—the establishment of the Landlord System. While the peculiar character of the system introduced in Bengal was no doubt the result of particular local and historical circumstances men like Lord Cornwallis may well have thought of the great benefits that the landlord system would confer on the land. And this was natural when they had before their eyes the results of the work of private experimenters like Tull or Bakewell and of private landlords like Townsend and Coke. But while the administrators could create the landlords they could not equip this newly created class with the social traditions of the English country gentry—traditions which were peculiar to England and which were lacking even across the channel in contemporary France. The result of the experiment is well known. Whatever else may be claimed for them, the landlords either in the permanently or the temporarily settled provinces have not functioned as pioneers of agricultural improvement.

The difference made by the political and social environment is even more strikingly brought out when we consider the nature of the development of modern industry in India. Veblen has pointed out that the acquirement of the "premises and logic" of modern technology is a sufficiently simple matter and that in the process of this acquisition the borrowers have certain advantages over the originators. In an acute analysis he lays bare the factors to which was due the advance made by German industry in competition with the British. Apart from the absence of conventional restrictions or obsolescent equipment the German industry possessed at the start certain special advantages. These were, an educated middle class with an intellectual habituation favourable to the ready acquisition of modern technology, a sufficiently well-instructed force of operatives and workmen and the fact that the German adventurers in the field of business were captains of industry rather than of finance

who were accustomed by tradition to be content with a relatively low return.[12] Similar favourable circumstances obtained in the case of Japan also. The policy of the governments in the two countries also actively influenced the course and pace of their industrialisation. In this vital matter the predisposing social and political conditions are thus seen to have very considerable influence. This is true of India also; the course of such development of industries as has taken place in India has been largely moulded by our social and political environment. In their aptitude for taking to modern machine industry both our educated and our working classes inherit traditions and have characteristics very different from those currently attributed to Germans. And even more important than this is the fact that the large majority of our industrial capitalists are recruited from the ranks of those whose traditions and habits of thought have been formed in the vocations of the money-changer and the financier. It would be easy to show how all these circumstances have had their share in shaping, in the past, our industrial history and how they continue today to dominate the situation.

The development of economic ideas since 1920 has sometimes been called "neo-mercantilist." But if by the mercantilist tradition is meant the tradition of the social thinker to speculate in relation chiefly to the concrete problems of his environment and to think of the good of the collective group of which he is a member, there is no reason to state that there ever was a break in that tradition or that it survived only in some countries and not in others. And let me state this, that I do not feel that the social thinker is to blame in ordinarily adopting this point of view. Except in the realm of abstract speculation the specific local circumstances are of the utmost importance in all social studies, and it is but natural that the turn that social sciences take in a country should very largely be determined by the environment in which the students find themselves and the urgent problems which they are called upon to tackle. When one frankly accepts this point of

[12] Veblen: *Imperial Germany and the Industrial Revolution*, Chap. VI.

view the peculiar nature and the particular trends of the Anglo-French and latterly the Anglo-American tradition in economic thought become clear and it becomes unnecessary to charge the British economists with hypocrisy. It becomes at the same time evident that the application of the lessons of British experience and of the views of Anglo-American economists have distinctly limited validity.

I may conclude this part of the subject with the observation that we must reject the *laissez faire* bias in economic speculations, reject the pseudo-universalism which consists merely in the assumption of a uniform set of conditions as ruling in the world without enquiry into the differing needs and circumstances of the various peoples, and we must beware of the immense difficulties involved in the application of the results of theoretical analysis to practical problems. And as Mr. Shove says, we must remember that "the economist who knows his business relies in the main on disciplined and informed common sense," and that "the more he knows about men and their ways the surer will be his touch in making the necessary judgments."[13] Mr. Shove also proceeds to point out that the student, if he wills, has much greater opportunities of acquiring and properly analysing such knowledge than the practical man.

Modern apologists of *laissez faire* tend usually to argue that *laissez faire* does, in the long run, operate well and bring about a stable equilibrium and that its shortcomings are glaring only for the period of transition. This sort of reasoning seems, however, to miss the very core of the situation. In a stable or static economy where changes did not take place at all or took place only very slowly, the concept of *laissez faire* is extremely unlikely to originate. A quasi-static society is bound to be dominated by concepts of order and of just price. *Laissez faire* is a prescription essentially for a changing economy. Its chief claim is also founded on its efficiency in directing changes in the most advantageous channels. Now, a changing economy under modern technological conditions is an economy which is

[13] G. F. Shove: Economics and the Social Sciences in *The Social Sciences, their relations in theory and teaching*, p. 160 (1936).

perpetually in a state of transition. To say then that *laissez faire* fails only in periods of transition, is effectively to give up the whole case in its favour. The fact of the matter is that *laissez faire* does not suit all types of changing economies; it suits only one phase of the change, that phase in a country when the transition from one economy to another is brought about under conditions of constantly growing prosperity. It thus suited the England of the nineteenth century or U.S.A. when the resources of that country seemed limitless. The condition of India has, however, been for the last century and a half very different and continues to be different. Throughout this period India has been bearing the brunt of the results of the technical progress—both agricultural and industrial—in other countries. Its internal situation has been such that it has not found it possible to go a long way in adopting modern technique. Hence, each important fresh advance in technique has created for us problems of unemployed resources and men. The government in India has done nothing to smoothen the progress; it has, on the contrary, perhaps done something to aggravate the difficulties. The entire period has been, therefore, one of grave difficulties. Such advantages as have accrued to us have been mostly incidental and accidental; they have for the major part been incidental to the industrialization of the other countries and to the cheapening of manufactured goods. The period of technical change, so far as one can look into the future, is by no means nearing its end and we may expect a continuous alteration of the technical structure of industry and notable advances in agricultural methods. As such changes are always found to be pre-dominantly to the advantage of highly capitalised and technically advanced societies in relation to those backward in these respects, the changing economy of the near future will present to India, problems essentially similar to those encountered by us in the recent past. A national economic policy for our country must, therefore, be one which is suited to a period of transition; the character of this period of transition we can envisage from our experience in the past.

It is not my intention to discuss in detail the manner in which such a policy could be built up or the main features

that it might exhibit. In order, however, to illustrate what I mean by a national policy suited to a changing economy or to a perpetual period of transition, I shall refer briefly to certain aspects of it which I feel to be important. I would put in the forefront, the problem of Relief. I suppose it will be readily agreed that an outstanding feature of a changing economy is some measure of insecurity. This insecurity will appear chiefly in the results of the employment of resources. In view of constant changes that may be taking place nobody can rest assured about the continuance of the profitable employment of natural and capital resources or of labour. A change may lead to an almost sudden cessation of employment in certain directions as happened in the case of indigo growing and manufacture, or it may mean a continuous deterioration in the conditions of employment in a particular industry over a long period as has been happening for over a century in the handloom industry or it may mean the cutting off of a resource and the upsetting of the balance of the economy of a class as happened after the introduction of motor transport in those tracts where the peasantry relied partially upon the earnings from carting. We are today facing the problem created by the accumulated effects of a series of such changes. This has rendered the Indian problem of the unemployment of men and resources not so much cyclical as chronic. In the circumstances, the primary social responsibility is, of course, that for the relief of distress caused by this historical process. In most countries even of the western world poor relief has been traditional and unemployment insurance in one form or another covers an ever-widening field in recent years. In India the only measure of this character adopted has been the opening of famine relief works by government at times of widespread failure of crops. The incidence of this relief is, however, occasional and it is further available only in times of failure of crops due to natural causes and not in other times of agricultural distress as, for example, that brought about by a collapse of prices. I do not think that it is necessary to argue the case for the urgent need for the introduction of some general system of poor or unemployment relief in India. The question, however, is rarely mentioned except sometimes in

connection with industrial labour; and the method or the cost of such a measure are subjects which have not yet been adequately discussed. I am personally led to think that the best way of meeting the problem is to follow the same methods as those devised by the famine relief administration. Instead of framing programmes of relief works which are resorted to only occasionally there should be continuous schemes of annual public works which would afford the necessary employment and relief. The provision would be necessary chiefly in the off-season of agriculture. There should be no dearth of suitable items for such a public works programme. The extent of the construction of roads, embankments, wells, tanks, or work of afforestation, etc., that could be usefully undertaken in rural India is very considerable and this is work that will enlarge in a productive manner our capital equipment. Obviously, the scale on which these annual works are provided would be very much smaller than is usual in a year of famine; they would also not be large concentrated works but local works scattered over the districts. I do not also think that their cost would prove them uneconomic. In other countries where the policy of relief through public works has been found costly that has been largely because of the need of adapting labour, which was mainly industrial, to work to which it was unaccustomed and in some respects unsuited. With us, however, labour seeking work on relief works would be accustomed to the work it would have to do. The provision of work along these lines would obviate many of the difficulties in the way of the administration of relief or insurance schemes on the western model; and this seems to me the best way in which to begin to tackle this problem. I am aware that the cost of such a continuous public relief works policy would be considerable; but I am convinced that whatever the cost it must be borne. For, this is a primary responsibility which the society must recognise and the state should take upon its shoulders. It will be realised that what I propose bears no relation to the concept of a national minimum. It falls short even of a general system of poor relief. It is merely the belated generalised acceptance of a responsibility for providing work to those seeking it which even the *laissez faire* Indian

government of the last century accepted as falling on itself during times like that of a famine. The effects of the changes of the last century have not been uniform; some classes have prospered greatly owing to them while others have suffered. The least that can be expected in a social group is that those who suffer are saved at least from complete starvation. It will, of course, be no use undertaking this responsibility if it means a further increase in the burden on chiefly the agricultural classes and I take it as axiomatic that in any future reconstruction of our economy a correction of the regressive nature of our tax system will be the first to be attempted. There are many other incidental advantages which I consider will follow the adoption of such a public works relief policy. I, however, advocate it here mainly on the ground that it represents the beginning of an essential step in the formation of the economic policy for a changing India.

The second point to which I would draw attention is the regulation of the pace of the transition. It is obvious that the future direction of technological change is unpredictable and the area that it may at any time cover cannot be foreseen. It is, therefore, not possible to keep society in a state of preparedness for the impact of the next set of changes. Further, given the distribution over area of the population, the training for particular vocations imparted to men and the investment in durable capital goods the extent of change to which economic society can adapt itself during a given period of time is limited. The costs of a rapid transition are both material and psychological. It is often argued that each change tends invariably to a somewhat greater economic welfare in the future and the dilemma of a clash between security and progress is posed, with progress being usually taken as obviously preferable. It has, however, to be remembered that periods of transition are short only in comparison with the span of human history but are long as human lives go. They often cover generations. And in view of this it is arguable that it should not after all matter much, in the long run, whether a particular set of technological changes took effect immediately or some years later. Economists in the early decades of the nineteenth century usually recognized the need for regulating the manner in

which an invention was adopted. J. B. Say, for example, recommends that the State should deal with the problem of technological unemployment in the following manner. "Restricting in the beginning the use of a new machine to certain districts where labour is scarce or required in other industries . . . providing in advance for the employment of the idle by undertaking at its own expense works of public utility such as a canal, a highway, a big building . . . promoting a transfer of population from one locality to another."[14] This advice was ignored in the nineteenth century because the need for it was not felt by the industrially advanced countries; today its importance is being slowly realised. However, the chief type of control exercised at present over the introduction of new inventions is that by the activities of various types of vested interests. If the State itself controls investments likely to be affected by new inventions it is usually prompt in controlling them. The best instance of this is, of course, the attitude adopted by all governments which own railway systems towards the extension of mechanical road transport. The Indian government, faced with the new means of transport, talks readily of the dangers to public investment; but it does not yet recognise the corresponding responsibility where the traditional mode of living of millions of people is similarly endangered. The extent of the suffering involved in the process of transition is yet very inadequately realised. The artisans and the agriculturists have undoubtedly suffered the most. The history of the fortunes of the handloom industry is a continuous record of partial stabilisations followed by ever-fresh periods of disaster. I can vouch from the findings of detailed studies of conditions in centres like Sholapur and Poona for the precariousness of the equilibrium in the industry and the appalling conditions of work and living obtaining within it. And yet governments have attempted little to remedy or to alleviate the situation. Whether it was on account of a general belief in the wrongness of governmental help or latterly because of a belief in the

[14] Quoted in *Technological Trends and National Policy*. (National Resources Committee, U.S.A.), p. 86.

unworthiness of an industry using machine yarn," the handloom weavers as a body have been left much unto themselves. Theirs, however, is merely the outstanding specific example of a large genus.

The potential field of the origin of technological advance is vast; it is coextensive with the whole of the area where advanced technological methods of production are followed and their practical and theoretical problems are systematically studied. Any important advance has also repercussions which cannot be confined to its own sphere or to the area of its origin. Through the mechanism of international trade the results of all changes affect the economy of other industries and other regions throughout the world. Regulation of even the most elementary kind is, therefore, possible only if the economy of a country is to some extent insulated. Complete regulation would be effective only if the country was completely self-sufficient and its economy completely planned. The first step in the regulation of change is, therefore, to build up a regime under which the impact of events in other countries can in some measure be warded off. Every country in the world, including England, has during the last ten years accepted the desirability or the necessity of this step. In respect of the control of the pace of adopting new technological devices governments outside the totalitarian countries have yet attempted little. The chief operative influence in this regard in the advanced countries is the opposition of organised labour to certain forms of rationalisation. There is, however, no reason why government should not enter this field of regulations. In a country like India, there is every reason, as I have attemptd to show, why it should do so. The regulation to be successful must necessarily be attempted over the whole extent of the country. Its form, however, will vary from instance to instance.

Lastly, I should like to refer to another aspect of national economic policy, that relating to the location of industry. Ours is a vast country and the problem of location is of particular importance in it. In recent years we have had a controversy regarding the location of sugar factories and the permissible extent of the development of

the sugar industry in the country. The report of the Tariff Board on the heavy chemicals industry pointed to the great advantages of a concentration of that industry. But its purely negative policy would not allow our government to do anything in this regard. I may also draw attention in this connection to the claim made by the iron and steel industry in India in respect of "freight disadvantages." This claim was allowed by the Tariff Board but it raises an important question of principle which needs careful consideration. The claim of the Tata Iron and Steel Co. in effect means that even a single monopolist concern, wherever situated, ought to commandeer the whole of the Indian market. At the same time, under our present policy, such a monopolist concern would be under no obligation not to indulge in rate-cutting to prevent the emergence of a competitor even in a distant part of the market. I have, of course, no intention of implying a judgment on the merits of the claim and mention it here merely to indicate the type of problems that have necessarily to be considered.

I would also draw attention to problems of location of a somewhat different character. One of the main reasons adduced for a conscious direction of economic development has ever been the danger of a lopsided growth in any region. The need for diversity in forms of economic life has been emphasized during the last decade in particular. Even in a comparatively small country like England the obdurate problem of the "distressed areas" showed the vital need for a balanced regional economy and the report of the recent Commission on the location of industries has accepted the principle of "regionalism" in these matters. Considerations of this character have even greater force in a vast and a comparatively much less homogeneous country like India. In addition to other things we have suffered during the last 100 years from too great centralization and an almost entire neglect of local needs and circumstances. I am aware that there is a feeling in some quarters that emphasizing the claims of the region or the locality is tantamount to encouraging particularism and is, therefore, anti-national. I am afraid, however, that a lot of this talk is interested and arises from the desire of powerful groups to be allowed to

exploit without obstruction or regulation the entire resources of this continent. While vested interests in India are too ready to seek support of arguments that would obtain for them a field free from external competition they often show themselves extremely impatient of the logical extension of these arguments, *viz.*, internal regulation. An undue concentration of industries in one region is bound to accentuate the difficulties in other regions and a pure *laissez faire* attitude towards internal financial and industrial exploitation is likely to give rise to forces making for economic and social disintegration over large areas. While it is true that the claims of the regions can be carried to absurd limits we are yet far from any extremes in this country. For, what we have still to fight for is the recognition of the fundamental claim that the concrete facts of the situation shall be allowed to shape an appropriate positive economic policy for the country; and what I would emphasize is that in the shaping of this policy the legitimate claims of the major geographical and social regions in the country should be given due weight.

I have done. Indian economists must consider themselves very fortunate as the pioneers of their studies. Men like Ranade, Dutt or Wacha who laid the foundations of Indian economic studies laid them very truly; for though rigorous in their analysis they moved close to reality. While fortunate in our leaders other circumstances have no doubt been inimical to a proper and rapid growth of economic research and teaching in India. Those in authority over us have for the most part and for obvious reasons been reluctant to accept our point of view. Their origin and their training necessarily breed in them other preconceptions and prejudices. They still cling largely to *laissez faire* and to pseudo-universalism and they reluctantly and only partially admit the overwhelming importance in the shaping of policy of the knowledge of local circumstance and social background. These are, however, the inevitable results of our present situation and must by academicians be accepted philosophically. We should be wrong, however, if we allowed these circumstances to discourage us. We must persevere in our work and our studies and dili

gently prepare ourselves for the time when our labours may become more effective and our counsels more heeded.

The Indian economist has often been reprimanded from on high for paying attention to the political aspects of the problems with which he was confronted. The charge, if true, would merely show that some of us have a proper sense of the realities and would, in my opinion, be a matter for congratulation rather than complaint. Holding the views that I do regarding the rôle of the economist and the scope of economics I need not say that I feel specially pleased that we are today meeting in a joint session with the Indian Political Science Conference and I trust that this session is merely the first of a long and fruitful series.

DISCUSSION ON PAPERS

PRICE LEVEL IN INDIA

28th December, 1940

Under the Presidentship of Prof. D. R. Gadgil, the Indian Economic Conference opened today with a series of papers on "Price-level in India with special reference to Agriculture." Mr. B. Govinda Rao started the discussion with a paper on the "Price-level of tobacco in the Guntur area." After a factual analysis of the state of affairs obtaining in the Guntur area he referred to the growing importance of tobacco as a commercial produce to the Indian agriculturist and to the inefficiency and chaos prevailing in the produce market of India. But, he said the future promises to be bright if the credit marketing difficulties are overcome by better storage, transportation and distribution of the stock, as well as by cheaper credit.

Mr. G. N. Krishna Murthy then presented a paper, along with Mr. A. P. Sreenivasa Murthy, on "The trend of agricultural prices in Mysore during the decennimum 1928—37." The paper was, he said, an attempt to investigate the trend of prices and its effect on production, trade, value of land, the standard of life and the general economic position of the Mysore agriculturist. Mr. Krishna Murthy suggested that the agriculturist would benefit immensely if the recommendations of the National Planning Committee—such as standardisation, grading and ware-housing, better marketing facilities—were adopted with the necessary alterations to suit local conditions.

Dr. A. I. Qureshi dealt with the "Price movements of some important agricultural commodities in Hyderabad." In the first part of his paper, he described the price movements of the commodities consumed by the masses; mainly rice, wheat, jawar, thar dal, refined sugar and gur. He then passed on to the important raw materials such as cotton, linseed, castor seeds and groundnuts, and came to the conclusion that the Deccan cultivator has not profited by

the war and that if the export difficulties continue, he may fare still worse.

In a paper full of tables and charts Dr. P. J. Thomas traced the trend of prices of food grains in Madras in the 19th century. A period of depression between 1825 and 1850, followed by a boom from 1854 which burst in 1867 and gave place to a further period of slump till about 1884, and a revival with soaring prices right up to 1900—this, he said, was the history of prices in brief. Dr. Thomas also referred to the influence of world prices since 1850 and of gold movements later on the price level in India.

"Price trends during the last decade and their effects on Indian Economy" formed the subject-matter of Prof. S. G. Beri's paper. With a detailed survey of the price variations between 1929 and 1940, the Professor passed on to their effect on the different aspects of the country's economic life. He came to the conclusion that the Indian economy is particularly sensitive to a fall of prices owing to the predominantly agricultural character of the country and disparity between the cyclical movements of agricultural and industrial prices; and that sustained effort should be made by the government to bring about increased consumption of raw materials and food-stuffs, by stimulating industrialisation and such other allied policies.

An interesting discussion followed in which Professors A. K. Bhan, D. G. Karve, S. Kesava Iyengar, V. G. Kale, Dr. Gyan Chand, Dr. Dey and Dr. Misra participated. Almost every one of them advocated a policy of varying exchanges and, if possible, isolation or insulation of the Indian Economy. Prof. Karve suggested that the Government should help the agriculturist to secure a fair selling price, in view of the fact that the market prices prevailing differed widely from the producer's incomings as pointed out by Prof. S. Kesava Iyengar.

Mr. S. Kesava Iyengar further said that practically all the statistics given in the papers were wholesale dealers' prices, and the figures given by the Chairman of the Imperial Bank of India at the last general meeting of that Bank could be taken as typical of the country as a whole. But, the point was whether they were to consider the vicissi-

tudes of dealers' prices or whether they were to consider how the primary producer was affected by changes in prices as he received them. Even in the Punjab, the figures collected related mostly to urban centres. Mr. Kesava Iyengar suggested that in order to get a real picture of prices realised by the primary producer, some ten important rural trade centres in each district should be taken up and figures compiled at each of the villages periodically; these would give some definite idea of the prices in that district.

Mr. Iyengar then said more than currency policy, financial policy and marketing policy were responsible for the present difficult condition of the cultivator. In spite of the co-operative movement having been there for over thirty years, crop financing and co-operative sale were not even in their infant stage: it was not even the beginning of a beginning. The Indian Marketing Department loomed large in scale, but the actual progress made in the establishment of regulated markets and grading and sampling was extremely small. Mr. Iyengar submitted that unless short-term agricultural finance and marketing facilities were not adequately provided for, no permanent improvement could be reasonably expected.

Mr. Iyengar further emphasised the importance of limiting acreage and fixing a basic price for some of our very important agricultural products. What had been done in the case of jute in Bengal and sugarcane in Behar and the U.P. could be extended after due inquiry into other important crops.

Prof. D. G. Karve said—

There is a parallel between the movements of world and Indian prices during the decade before the last war on the one hand and similar movements in the decade before the current war on the other. In both instances, while the direction of Indian price movements was the same as that of the foreign, the degree of variation was much higher in India. This is due, not only to the predominantly agricultural character of Indian economy, but also to the peculiarities of the Indian currency system. The main object of Indian

currency authorities is to maintain a stable rate of exchange. In a period of expanding exports this policy has an inflationist effect and in a period of falling exports it produces a deflationist situation. The balance between prices and costs is thus unjustifiably disturbed by the currency policy.

It is of the most urgent importance that the policy of stable exchange should be replaced by one of more elastic parities and the maintenance of a certain defined price-level should be a major objective of currency management.

Not only in its external but also in its internal influence, the price-level ought to be protective. The greater disparity between industrial and agricultural prices obtaining in India, as compared with the situation elsewhere, is partially explained by the absence of any agricultural price policy. Protective measures, customs duties, rearmament purchases—these helped to keep up the non-agricultural prices, at least to an extent. But the agriculturist was thoroughly exposed to the blighting effects of the depression.

Even normally, the highly deflationist and neglectful attitude of the currency authorities, works for an unremunerative price for the agriculturist. A fair selling price ought to be adopted as an objective of agricultural prices. This objective should be reached by measures of currency regulation as much as by direct control.

Unless a policy of rigid exchange stability is replaced by one of elastic exchanges, and until a fair selling price for national production, suitably coordinated and controlled, is placed in the forefront of currency objectives, the Indian price-level will continue to work to the detriment of the national producer, and especially of the agriculturist.

Prof. S. G. Beri thanked previous speakers for their appreciation of his paper on "Price Trends during the last Decade and their effects on Indian Economy," and for the useful criticisms offered by them. Replying to the various points of criticism of his paper, he pointed out that he had not neglected to allow for the effect of the ratio on the price-level during the period of the Depression in India and had also stressed the need for the adoption of a suitable monetary policy by the Reserve Bank of India.

As regards the disparity between agricultural and industrial prices referred to by him in his Paper, Prof. Beri agreed that the adoption of a policy of industrial protection since 1924 was one of the contributory factors in the situation, but that did not affect his main contention that agricultural prices were more vulnerable to the impact of the trade cycle than industrial prices.

Much had been said about insulation and isolation of our economy from that of the rest of the world. While isolation was impracticable, even insulation was possible only within a certain range, as shown by the limited measure of success which had attended the efforts of Totalitarian countries to establish a closed economy.

Referring to his advocacy of industrialization for securing increased consumption of raw materials in the country itself, Prof. Beri pointed out that he had not urged industrialization on the Western pattern, but balanced industrial planning based on simultaneous development of three distinct groups of industries; namely, large-scale industries, small-scale or medium-sized industries and cottage industries. Moreover, he had also emphasized the need for a balanced agricultural economy by urging the development of spare-time occupations in order to supply a second string to the bow of the farmer and the adoption of measures for securing economic holdings and improved marketing. As regards the suggestion made by a previous speaker in favour of crop planning Prof. Beri thought that in the conditions of India legislation based on the compulsory principle was not feasible under the existing circumstances: what was possible was voluntary crop planning based on expert advice.

Summarising the debate Prof. Gadgil emphasized the unsatisfactory nature of the Indian statistics of prices. The index numbers available were not very reliable. Further, as the movements of prices of many commodities were not necessarily the same in the different regions it was of great importance to pay special attention to regional price statistics and the construction of regional index numbers. Prof. Gadgil also referred to a number of points on which additional data would be necessary for measuring such things as the influence of the price-level on the agriculturists' real incomes.

DISCUSSION ON PAPERS

THE PROBLEM OF VALUE IN A SOCIALIST STATE

29th December, 1940

Opening the discussion on "The Problem of Value in a Socialist State" Mr. J. J. Anjaria observed that the difficulty of calculating the cost of production made it difficult to bring about a balance between production, consumption and distribution with the help of an automatic mechanism, like the price system, in a Socialist State. Such equilibrium would have to be achieved by a conscious effort of the central authority which settles the relative importances of things in the social order envisaged, with an eye to public good.

Dr. R. Balakrishna propounded in his paper on the "Rate structure of Public utilities in a Socialist State" that the inherent features of such industries need not, or do not, change in a socialist economy. For, public control and price discrimination are indispensable in public utilities whether under capitalism or socialism. There cannot be much difference, the Doctor said, between capitalism and socialism with regard to price fixing in public utilities.

Mr. D. H. Butani raised a point of fundamental importance, that we have to bear in mind the qualitative difference between socialism and capitalism; that, whereas we consider material efficiency as the criterion under capitalism, social efficiency has the place of honour under socialism. Since the basic social values do not concur there is no common ground of comparison between the two. In spite of the ideological differences, it was shown by Prof. V. L. D'Souza how the actual working mechanism was surprisingly similar in both cases; how the method of trial and error was the essence of instrument in either case; and how this could be done under socialism with the help of the method of imputation. There is, he pointed out, a reduction of divergence between the social marginal net product and the individual marginal net product under socialism.

Dr. M. H. Gopal dealt with the fundamental concepts in his paper on "The Rôle of Cost in Socialist Pricing." Since the objective and structure of the two systems differed widely, price determination differed in principle as in practice particularly with reference to the rôle of cost in the price structure. Under socialism cost of production is not an important element in the price as profit and losses are borne by the community as a whole.

Prof. D. G. Karve in his paper said that the labour cost can be calculated with very fair approximation if the choice of occupation were allowed. And since the labour cost schedule is there to calculate, its determination renders the cost schedule less unreliable. We envisage, Prof. Karve observed a state of affairs in which supply and not demand is socialised; and that would help the regulation of market by adjusting the prices or demand, whichever is easier and more convenient.

Mr. T. Krishna Murthy presented a mathematical approach to the problem of output and price in a socialist economy. He suggested that rate discrimination was not possible in a socialist state, because of the improbability of isolated market in such narrow limits; and suggested that a marginal cost equalisation fund should be set up to balance the profits and losses occurring in the different industries. On the consumers' side, maintenance of consumers' sovereignty was easier and better, said Mr. T. Sathyanarayana Rao in a paper on "Saving, investment and enterprise in a socialist State." The mitigation of the trade cycle was easier under socialism because the decisions of the Central authority with regard to saving, investment, etc., are prone to be more rational than under capitalism. Mr. B. R. Subba Rao explained the general nature of the pricing process in Soviet Russia and the influence of the purpose behind the plan on the working. The maximisation of social welfare under socialism was stressed by Mr. B. Thirumalachar, as for instance, by localising trouble or mistakes.

Rationality of any system, said Dr. Gyan Chand, depends on the social purpose of the system. But this question does not arise in the transitional stages because of the obvious necessity of large-scale rationing. The adjust-

ment of supply does not depend on the price; it depends on the nature of the commodity. As regards the administrative difficulties, Dr. Gyan Chand deplored the scarcity of supermen, but suggested a system of public services for economic administration to help capable men to step into the shoes of the supermen.

Mr. S. M. Shafi and Prof. S. K. Rudra suggested in their papers the incongruity of comparing the two types when the unit of value as well as the method of valuation differed radically; while Dr. Dey pointed out that on the cost schedule we had an extra item in social cost under socialism. Continuing, Dr. Dey said that the interference of the State in economic matters differed between the two systems only in degree. And whatever the system of planning, the plan should be formulated and revised from period to period.

In the discussion that followed the reading of papers, Dr. P. S. Lokanathan said that it was impossible to do away with small initiative in any form of society. The cost of service principle of valuation, is more important under socialism than the value of service principle, because the losses are borne not by any class of people owning capital but by the whole community. It is therefore necessary that the cost of service principle of valuation should be adopted. Dr. V. K. R. V. Rao suggested that the state should put the necessities on the market just as any entrepreneur. The means of production should be the monopoly of the State and the State should hire them out in a competitive manner after producing the socially necessary goods. What really mattered under capitalism is not the existence of freedom of choice, but the psychological influence of such a state of affairs. Prof. S. Kesava Iyengar, Mr. A. Krishnaswami, Mr. J. J. Anjaria, Dr. R. Balakrishna, Dr. M. N. Gopal and Mr. T. Krishnamurthy took part in the discussion later and attempted to meet some of the issues raised during the debate.

Mr. S. Kesava Iyengar said that the main feature of capitalism was pricing and that of socialism was rationing, and the attempts of some of the British writers to retain pricing in a socialistic state simply meant that they were really capitalists in essence although they would like to put

on the fashionable cloak of socialism. Both pricing under a socialistic state and rationing under a capitalistic state would have quite different meanings from the same terms in their proper places: pricing and rationing would be at best tolerated as a necessary evil under exceptional conditions, respectively under a socialistic and a capitalistic regime. Mr. Kesava Iyengar thought that theorising on this subject would not be profitable unless one's mind was clear about the definition of the term "socialism." It would be much more profitable to study the actual working of an important industry in Russia, the U.S.A., Italy, Germany and even in Mysore in which state a number of industries were worked as Government monopolistic industries.

Finally, Mr. Kesava Iyengar added that capitalism implied ample supplies, which could be only when there was an empire or nature was very liberal or science was very fruitful. Normally, scarcity of a severe type was the rule, and to solve this problem, rationing was the only reasonable means—to which even the leading capitalistic country in the world had resorted under pressure of war conditions. Thus, "libertarian socialism" would be something like a round square or a square round. The important thing was to get more facts about the socialistic state in actual working—whether in the U.S.S.R. or anywhere else.

Summing up the President said that valuation is an essentially extra-economic process and the pricing system merely implements values externally determined. How the national income will be divided between various classes was determined not according to economic criteria but by social and political forces. The consumers' sovereignty was a myth even today for the vast majority of consumers. The field of choice of the consumer looked large under the capitalist system only because of the concentration of a large part of the income in comparatively few hands. Under a socialist system the aims of the regime would yield the basic values on which the pricing system must rest. Thus if the main aim of the regime was the guarantee of *a minimum standard of living for every worker* the basic equation would be the equivalence of a unit of wage with given quantities of standard real commodities. From the

basic equation an elaborate pricing structure could be built up with an assumed rate of interest. It might also be emphasized that in a socialist economy while the pricing process would be utilised to gather data about consumers' preferences it would not be allowed to dominate the working of the economic system in the manner in which it dominates the system today.

DISCUSSION ON PAPERS

PROVINCIAL AND STATE FINANCES

30th December, 1940

"Provincial and State Finances" formed the subject-matter of discussion of the Indian Economic Conference which held its third meeting this afternoon. Dr. M. H. Gopal presented the first paper of the day on "Public expenditure in Mysore." He applied the canons of public finance to the budget of Mysore and showed how an approach is made to the ideal of maximum social advantage. Economy and efficiency appear to be the governing considerations in the spending policy of the Mysore Durbar.

"The Depression finance of the Bombay Govt." was discussed by Mr. T. M. Joshi. He criticised the policy of balancing the budget irrespective of the economic condition of the province and advocated a sort of Depression Fund to help the balancing of revenue and expenditure in the long run.

An analysis of the "Non-tax revenues of Mysore" was put forward by Mr. S. Gopalaswamy. Revenue from natural sources such as forest and the Kolar Gold Fields amounted to about 35·5%. Industries gave 47·5% and the remainder was formed of departmental receipts and the like. Apart from these direct returns the investment on industries has also resulted in an increase in the taxable capacity and tax heads of revenue.

The financial policy of the Orissa Govt. was discussed by Mr. Sadasiva Misra in his paper on "Five Years of Orissa Budget (1936-37 to 1940-41)." The per capita expenditure in Orissa was about the least under most heads. Surprisingly enough, the speaker said, no new tax has been levied in Orissa, nor has there been a real increase in public expenditure.

"The tax system of Mysore State" was discussed by Mr. K. S. Nanjundiah in a paper of the same caption. He explained with the help of statistical data how the non-tax revenue of the state is on the increase, so that the estimated

return under this head for 1940-41 is as much as 44%. The main sources of revenue under the tax head are land revenue and the excise, while the income and super-taxes are also gaining importance in recent times.

Dr. A. I. Qureshi presented "A Note on the financial system of Hyderabad" and said that the adoption of a triennial budget as in Hyderabad would be advantageous because of the greater period of adjustment allowed. He also brought to the notice of the conference the existence of a fund very much like the exchange equalisation account in Hyderabad to control the rates between the English and Hyderabad currencies. Prof. S. Kesava Iyengar dealt with some of the other special feature of state finance, especially those of Hyderabad and Mysore, in his paper on "British and Indian Finance." The Professor said that the utilisation of natural resources was done better in the area called "Indian" India. And the establishment of controlling authorities for railways, or the state ownership of railways, in some cases, added to the benefits derived from these public utilities by the consumers.

Mr. B. N. Rohatgi introduced the house to "Some aspects of Provincial Finance." There was a great necessity for increased taxation on account of the increase in public expenditure and he suggested the imposition of death duties, agricultural income-tax, general and selective sales taxes and a tax on employment to meet the needs. In his paper entitled "Financial problem under Provincial Autonomy," Dr. B. K. Madan also stressed the necessity for fresh taxation, but observed that the claims of economy in expenditure came first. In the existing state of affairs, the expenditure on the civil services, for instance, cannot be reduced because the constitutional incapacity of the provincial governments to carry out a new economy drive. It must also be borne in mind that mere taxation figures do not indicate the burden of tax per capita. For raising the standard of life is more important than mere reduction of taxes.

Mr. S. S. Santhanam pleaded for shifting the burden of taxation from rural to urban parts in his paper on "Some Problems of Provincial Finance of Madras." The financial plan should aim at the intensification of the policy of indus-

trialisation as it would help the agriculturist immensely. Mr. Santhanam was of opinion that the expenditure on public services should be reduced very much.

"The financial situation in Sind" was analysed by Prof. N. K. Bhojwani who characterised the position as "undoubtedly hopeless." He traced the effects of the Lloyd barrage debt on the provincial budget, a budget which had all the instabilities due to the separation of Sind from Bombay without consideration of the barrage debt. Since the land revenue and yield resulting from this scheme was not up to the expectations, there was nothing strange about the difficulty of the Sind Government. Besides, the rate of interest of $4\frac{1}{2}\%$ on the loan to the Sind Government by the Central Government was unduly high and Mr. Bhojwani suggested the reduction of the rate of interest to 3%.

The discussion on "Provincial and State Finance" was continued this afternoon, when the Indian Economic Association held its final meeting of the 24th session. Mr. Ghosh presented the financial situation of Bengal and considered the absence of unemployment relief as unfortunate. The Bengal Government might become bankrupt, he said, if the present state of affairs continued. Mr. Sarkar drew the attention of the house to the weak financial position of the U.P. and put forward several suggestions to improve the budget. The speaker was of opinion that there should be a reduction of expenditure on public services and the like, since the taxable capacity of the province was low.

Dr. P. J. Thomas examined the peculiar ways of accounting and budgeting followed in the various states in his paper, "The finances of the leading Indian states." He followed it up with an analysis of the revenue heads of the states. Whereas the land revenue is about 1/3 the total in most states, the realisations in Travancore and Cochin amounted to barely 13%. Customs duties, however, accounted for 20% in these states while they assumed a place of relative unimportance in the budget of other states. Tax per capita in Travancore was as much as Rs. 11, while in Mysore it was Rs. 1-12-0 and in Hyderabad Rs. 1-11-0. Though some of the states are in many ways ahead of British India the tax system is highly regressive in several

of them, and efforts are urgently needed to remove this defect. A more liberal policy of undertaking public utility industries by the states would not only add to their revenues but would lay the foundations of a stable economic prosperity.

The last paper of the day was submitted by Dr. B. V. Narayanaswamy Naidu on the "Finances of the Madras Province 1920—40." With argument backed by facts and figures, Dr. Naidu traced the increase in the income of the Government of Madras as well as its expenditure. But the increase has not kept pace with the increase in expenditure. Since further retrenchment in expenditure is scarcely possible, recourse to fresh taxation seems to be the only alternative. And since increased taxes must be based only on increased taxable capacity of the people, planned and concerted measures must be taken to improve the income of the people. A scientific study of the working of existing taxes and the scope for new taxations should be followed by a bold and forward policy in regard to taxation, loans and expenditure, aiming ultimately at the maximisation of the agricultural and industrial production of the country and the improvement of the conditions of the masses. For "In the field of finance as in other spheres of human activity, extreme conservatism may be only another name for stagnation: and a policy which appears risky and dangerous may prove in the long run to be the safest and most beneficial."

The President summed up the debate briefly and complimented the house on the large number of papers on comparative conditions in various states and provinces. He was, however, not sure of the general reliability of the usual indexes used for purposes of such comparison such as the per capita expenditure on various heads. In his opinion, as both the level of income and the efficiency of administrative expenditure differed from region to region, such comparisons must be substantiated in detail. He further emphasized the need for concrete and detailed study by referring to the Hyderabad Departmentalisation Scheme about which what was really required was information regarding its actual working. All the papers showed the

extreme inadequacy of provincial resources for the work they had to do. They thus demonstrated the need for the revision of the division of resources between the Provincial and Central Governments. It was further clear that the standards of organisation and expenditure set up hitherto must be radically lowered and one of the most important changes in this regard was a change in the ideas of the professional and middle classes regarding their standard of living. Their ideas were the result of the 19th century inflated salary standards and must now be made to conform somewhat to the level of national income of the country.

Before the Association concluded its session, the President thanked the Mysore University and the Local Secretary on behalf of the members and Prof. V. L. D'Souza, the Local Secretary replied in suitable terms.

JOINT SESSION OF THE INDIAN ECONOMIC AND POLITICAL SCIENCE CONFERENCES

31st December, 1940

Current Topic: New World Order

Nine Economists and Political Scientists were engaged in engineering a new world order when, for the first time, there was a joint session of the Indian Economic and Indian Political Science Associations. As requested by Mr. D. R. Gadgil, President of the Indian Economic Conference, Dr. Beni Prasad took the chair.

Prof. V. G. Kale started with the belief that the old order had failed. He said that the new world order should not be a stubborn repetition of the League of Nations, which was a league, not of nations or peoples but of governments. Co-operation, said Mr. Kale, was the only principle which could bring about any durable international adjustment between the progressive countries of the west and the conservative countries of the east.

The fact that the late League of Nations was a confederation and not a federation was the reason ascribed by Dr. V. S. Ram for the failure of the League. Disarmament, said Dr. Ram, was the rock on which the League foundered. Reconciliation of nationalism with internationalism, the idea of liberty with that of authority were the necessary preliminaries for the establishment of a new international political order, its economic pre-requisites, being the termination of protection, an equitable distribution of raw materials and the maintenance of a constant rate of increase in population.

Dr. P. J. Thomas, who spoke next, said that the emergence of severe inequalities between the different sections of the old order was the cause of its collapse. No new world order could succeed unless the purchasing power of the teeming millions was raised. Improvements of the educational system and laying down the principles of a new

moral order were the other essentials of the new world order which could be run only on co-operative lines.

That we are still living in an old world order and want to draw a plan for a new order was the thesis advanced by Prof. Puntambekar. Finality in the establishment of a new order, which as yet was an unfinished task, could not be secured as we have not evolved a theory of progress. The result of this was that our attempts at remedying old wrongs did not right them but begot new wrongs. A world polity, said Mr. Puntambekar, could not be achieved by weak victims of imperialisms, for the world polity itself will have to be either imperialistic or socialistic. The other ingredients of the order would be a new international ethics and a new world economy, which may be co-operative in its features.

While explaining the implications of the suggestion of raising the purchasing power of the masses made by Prof. Thomas, Dr. Gyanchand said that it necessarily meant running the economic system in the interest of the masses; treating labourers as human beings; establishing a minimum standard of living; and eliminating profit motive. These call for institutional changes which would result in a relentless elimination of all vested interests. Hence there was the necessity of an international order which should not be rigid in its organisation and which should be backed by the necessary force.

Prof. Qureshi held the view that pure and free capitalism could secure durable peace. The present disorder was the offspring chiefly of economic protectionism. To end economic protectionism would mean the extinction of the nation state. There would be an inevitable world polity which would be federal in nature and which would indispensably be backed by the authority to force the will of the majority. We must bring about the free mobility of factors by putting an end to tariffs and other restrictionist measures.

The President Dr. Beni Prasad outlined in his speech the essentials of a new world order. There was the necessity of ending the dangerous dichotomy of industry and agriculture which served as a basis of dividing countries at

present. We had to replace mass production by adequate production through decentralisation of certain industries and limiting the produce of certain other industries. Socialisation of property either through drastic regulation of inheritance or through a more generous taxation of higher incomes was inescapable though it was a slow and evolutionary process. Stability was needed to give the system a fair trial. We had to make a right choice of the factors on which we place emphasis. There are several factors, such as religion and race, which have served as bases of political philosophies and systems. Progress, said the President, can be measured according to the harmony achieved in four directions; size, efficiency, liberty and mutual relations. The new world order will be successful only when it satisfies this fourfold but essential test of progress.

THE INDIAN ECONOMIC ASSOCIATION

REPORT FOR THE YEAR ENDING 31ST MAY, 1940

The number of members on 31st May, 1940, is 163 as compared with 165 in 1939. Efforts are being made to attract more members for the Association.

The financial position of the Association continues to show steady improvement; from Rs. 5,239-10-9 on the 31st May, 1939, the cash balance increased to Rs. 5,298-1-3 on 31st May, 1940. Besides, in accordance with the agreement regarding the Journal, the reserve fund is jointly held by the Association and the Allahabad University. This year the Association did not receive any donation from the Allahabad University. Most of the amount collected by way of subscription from members is spent for printing the Journal. Hence the income for the year is not very high. Every effort is being made to husband the resources of the Association. All the miscellaneous printing was done free by the G. S. Press, Madras. The thanks of the Association are due to Mr. G. Srinivasachari of the G. S. Press for printing and to Mr. B. Bhaktavatsalu, B.A., G.D.A., R.A., our Honorary Auditor, for auditing the accounts of the year.

Invitations were sent to all the Directors of Public Instruction, Heads of the Affiliated Colleges and the various departments of the Government with a request that facilities should be given to the teachers of Economics to attend the conference. The Committee appointed at the last General Body Meeting has submitted its report which will be placed before the General Body Meeting at Mysore.

I am greatly indebted to the President and Members of the Executive Committee for their help and co-operation. My task has been made easy by the sympathetic consideration I received at the hands of the members of the Association and the Managing Editor of the Indian Journal of Economics.

ANNAMALAINAGAR,
15th December, 1940.

B. V. NARAYANASWAMY,
Honorary Secretary.

THE INDIAN ECONOMIC ASSOCIATION

Receipts and Payments Account for the year ending 31st May, 1940.

RECEIPTS.

				Rs.	A.	P.
I. To Opening Balance:—						
(a) Fixed Deposit with Madras Provincial Co-operative Bank, Ltd, Madras ...				2,000	0	0
(b) Fixed Deposit with Bombay Provincial Co-operative Bank, Ltd Bombay ..				1,172	14	0
(c) Prudential Deposit with Madras Provincial Co-operative Bank, Ltd., Madras				1,540	1	6
(d) Current account with Madras Provincial Co-operative Bank, Ltd., Madras ..				419	5	6
(e) Cash with Secretary				107	5	9
				5,239	10	9
Less Amount paid to the Department of Economics, Allahabad University ...				534	5	0
				4,705	5	9
II. INTERESTS:						
On Fixed Deposits ...	70	8	0			
On Other Accounts ...	43	14	0			
				114	6	0
III. SUBSCRIPTIONS FROM MEMBERS:						
163 members at Rs. 12 each	1,956	0	0			
Less Received in advance last year	12	0	0			
				1,944	0	0
IV. ADVANCE SUBSCRIPTION:						
One member				12	0	0
V. AUTHORS' CONTRIBUTION AND MISCELLANEOUS				59	0	0
Total ...				6,834	11	9

PAYMENTS.

	Rs.	A.	P.
By Department of Economics, University of Allahabad, for 125 members at Rs 9 each and 38 members at Rs 8 each ...	1,429	0	0
Cost of Conference number	675	7	0
Expenditure on 22 refused Journals ...	6	14	0
Other Bills of the University	115	13	3
	2,227	2	3
Less amount not paid	823	2	3
	1,404	0	0
,, Postage & Telegrams	88	12	0
,, Clerical Assistance	40	0	0
,, Bank Charges	3	14	6
	1,536	10	6
VI CLOSING BALANCE:			
(a) Fixed Deposit with Madras Provincial Co-operative Bank, Ltd., Madras ...	2,050	0	0
(b) Fixed Deposit with Bombay Provincial Co-operative Bank, Ltd, Bombay ...	1,193	5	0
(c) Prudential deposit with Madras Provincial Co-operative Bank, Ltd., Madras	1,578	12	6
(d) Current account with Madras Provincial Co-operative Bank, Ltd., Madras	362	6	0
(e) Cash with Secretary	113	9	9
	5,298	1	3
Total ...	6,834	11	9

AUDITOR'S REPORT:—Audited and found Correct. Of the Rs. 823-2-3 due to the Department of Economics, University of Allahabad, the half-share of profits for the years 1938-39 and 1939-40. and the credit note for Rs. 30 will have to be deducted. Interests accrued on fixed and other deposits have not been brought to account.

MADRAS,
5-12-40.

B. V. NARAYANASWAMY,
Hony. Treasurer.

B. BAKTHAVATSALU, B.A., G.D.A., R.A.,
Registered Accountant, Auditor.

INDIAN ECONOMIC ASSOCIATION

TWENTY-FOURTH SESSION

31st December, 1940

The annual General body meeting of the Indian Economic Association was held in the Maharajah's College, Mysore, on 31st December, 1940, at 9-30 A.M.

Sixty members were present.

(1) The minutes of the General body meeting held at Allahabad were confirmed.

(2) The report of the Hony. Secretary and Treasurer and the Audited statement of accounts for the year ending 31st May, 1940, were considered and approved.

(3) The invitation of the Bombay University for holding the Twenty-fifth Conference at Bombay was accepted.

(4) The following subjects were selected for discussion at the next Conference:—

1. Development of economic thought in India (Ranade centenary).
2. Rural Cooperation in India.
3. Finance of local bodies.
4. Current topic.

(5) The following office-bearers were elected for the year 1940-41:—

President.

Prof. J. P. Niyogi, Minto Professor of Economics, Calcutta University.

Hony. Secretary and Treasurer.

Dr. B. V. Narayanaswamy Naidu, Professor of Economics, Annamalai University.

Hony. Local Secretary.

Prof. C. N. Vakil, Professor of Economics, Bombay University.

Members of the Executive Committee.

1. Prof. Gyanchand.
2. Dr. P. J. Thomas.
3. Prof. V. G. Kale.
4. Dr. H. L. Dey.
5. Prof. S. K. Rudra.
6. Dr. L. C. Jain.
7. Dr. A. I. Quereshi.
8. Dr. P. S. Lokanathan.
9. Dr. S. M. Shafi.
10. Dr. Radhakamal Muckerjee.
11. Prof. V. L. D'Souza.
12. Mr. D. R. Gadgil.

(6) Mr. Bhaktavatsalu, B.A., G.D.A., R.A., was re-elected Hony. Auditor of the Association. The Secretary was asked to send a letter of thanks to Mr. Bhaktavatsalu.

(7) The following were elected representatives of the Association on the Editorial Board of the Journal:—

(1) Prof. V. G. Kale.
(2) Dr. V. K. R. V. Rao.
(3) Dr. P. S. Lokanathan.
(4) Dr. A. I. Quereshi.

(8) The report of the Committee on Journal contract was accepted and Prof. V. G. Kale was requested to negotiate with the Allahabad University regarding financial arrangements.

(9) It was decided that members who wished to submit papers for being read at the next Conference should send them on or before 1st November to the President, who after scrutiny will send them directly to the press for being

printed as pre-conference number. The President will intimate to the authors of the papers whether the papers have been accepted or not. No paper shall, in any event, be accepted after 1st November.

(10) The question of suitably modifying the constitution and the bye-laws of the Association was considered and the following committee was appointed to report on the matter:—

1. Prof. V. G. Kale.
2. Prof. J. P. Niyogi.
3. Mr. D. R. Gadgil (*Convener*).

(11) The question of gathering information regarding the courses of study in Economics in the various Universities of India was discussed and Dr. V. K. R. V. Rao was requested to collect the necessary information and place it before the next Conference.

(12) The following suggestions put forward by members were considered and generally approved:—

(*a*) That the business meeting of the Association should be held on the second day of the Conference.

(*b*) That the Editorial Board should meet at least once in a year.

(*c*) That a consolidated members' list be printed.

(*d*) That an attempt be made to obtain from the railways special concessions for members attending the Economic Conference.

The Secretary was requested to take necessary action in respect of (*c*) and (*d*).

(13) The dates for holding the next Conference at Bombay were discussed. It was suggested that the Secretary should fix the dates in consultation with the Local Secretary.

(14) Vote of thanks to the President was proposed by Dr. P. J. Thomas and was seconded by Prof. S. K. Rudra.

(15) The meeting terminated with a vote of thanks to the Mysore University proposed by Prof. V. G. Kale and seconded by Dr. Gyanchand.

B. V. NARAYANASWAMY, D. R. GADGIL,

Secretary. *President.*